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COMPANION
TO
THE IRON TRADE,
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GENERAL ASSISTANT TO THE IRON-MASTER AND MERCHANT,
ENGINEER, MILLWRIGHT, IRON AND BRASS FOUNDER,
MACHINE AND TOOL-MAKER, BOILER-MAKER, GENERAL SMITH,
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FOR EXPEDITIOUSLY ASCERTAINING THE VALUE OF GOODS
SOLD BY THE CWT. OF 112 POUNDS,

FROM 1s. PER CWT. (INCLUDING THE FARTHINGS) TO 112s. PER CWT.,
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IRON-MASTER, KIRKSTALL-FORGE, NEAR LEEDS.

FOURTH EDITION,

CAREFULLY REVISED AND CONSIDERABLY ENLARGED BY HIS NEPHEW,

JOHN O. BUTLER, M. INST. C. E.

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PREFACE TO THE FOURTH EDITION.

The comparative rapidity with which the Third Edition of this Volume has passed out of print is a gratifying proof that the Compilation is of some value,—being now in use in all the principal Iron, Engineering, and Railway Works and Offices in the United Kingdom.

The present issue has had considerable attention bestowed upon it, and the additional matter selected for insertion will be found not only acceptable but valuable.

It is only necessary to state, that in this edition the Editor has made it his study to carry out still further the original intentions, and to extend the views, of his late relative, of respected memory, by collating and embodying the practical results of the latest researches for the use of practical men, and to which he himself in his daily avocations has constantly to refer.

JOHN O. BUTLER.

Kirkstall-Forge, near Leeds, July ½½, 1857.

PREFACE TO THE THIRD EDITION.

Twenty years having elapsed since the First Edition of this Work went through the Press, and a Third Edition being called for by numerous and flattering enquirers, the opportunity has been taken to endeavour to increase its usefulness by making such additions to it as the present and prospective wants of the Trade demand.

With this view, therefore, the present Edition has been carefully prepared. Several new Tables of Prices have been inserted,—much useful matter and memoranda added,—the whole of the latter part of the Work re-arranged, with a special view to easy and quick reference, further assisted by a copious Index;—and in "Strength of Materials" will be found the practical results of all the most recent investigations of scientific men, particularly William Fairbairn, Esq., who has courteously permitted extracts to be made from his valuable researches.

The work is again sent forth, with the hope that it will be found useful, and that the Printer *(in whom the Copyright is vested)* may have the same favour extended towards him that was accorded in the First and Second Editions.

J. O. B.

Kirkstall-Forge, near Leeds, August 15th, 1851.

The appearance, through the medium of the press, of the annexed sheets, was not, in the first instance, contemplated by the Compiler; but having introduced a written Calculator into the offices of his own business, and experiencing its usefulness, he has been induced, by the persuasion of his friends, to offer a similar one to the public in a printed form, but on a more enlarged and improved scale. In doing this he assumes no pretensions to originality; nor has he the presumption to obtrude in these pages the labour and science of other authors as the result of his own studies; but is desirous only of being considered an assiduous gleaner, and the humble contributor of his own researches.

The Compiler having been brought up in the Iron Trade, and being frequently applied to by operatives to assist them in making calculations, enabling them to contract for the Foundry and Smith's Work of public edifices and other erections, has been long of opinion that a small publication, comprising a set of Tables, showing the correspondence betwixt weight and measure, in the various sizes of Wrought and Cast Iron, could not fail to be acceptable to the public; particularly as the Iron Trade is daily increasing in importance, whether we regard the great improvement in its manufacture, the increase in its consumption, or its adaptation to so many useful purposes, both in a domestic and public point of view. To add to its usefulness, the Compiler has also inserted Tables, showing the correspondence betwixt weight and measure of Copper, Brass, Lead, and Cast Iron, whether in plates, pipes, coppers, or boilers, or otherwise; with a variety of miscellaneous information.

Great pains having been taken in revising and ascertaining the correctness of the calculations, it is presumed, First,—That the Work will be found a useful companion to the book-keeper at his desk, inasmuch as it will enable him to prove the truth of his reckonings with expedition and certainty. Secondly,—To the warehouseman, or salesman, by furnishing him with the means of ascertaining with promptitude, the weight of different metals by their dimensions, and consequently the value thereof. Thirdly,—The Compiler ventures to hope, that to the man of business it will be found a valuable assistant, by refreshing his memory with the solution of certain problems and rules in mensuration, the definition of decimals, &c., which, owing to his other avocations, he may have forgot.

In the calculations of the value of goods bought and sold, it was impossible to avoid the occurrence of farthings; but wherever they take place they are given in favour of the purchaser.

To avoid prolixity, the rates are confined as much as possible to the prices most generally in use, beginning with 2s. 4d. per cwt., and advancing by 3d. as far as 20s. per cwt.; and from thence by 6d. per cwt. as far as 42s. per cwt. Also, from one farthing per pound to one shilling per pound, advancing by farthings.

The Compiler having stated his views, and given a brief sketch of the merits of his book, now casts it upon the indulgence of the public; it remains for him only to observe, that having relinquished all profit on the work in favour of the Printer, he solicits for him such share of patronage as may repay him for the expense he has been at in executing the same.

The Public's most obedient humble Servant,

GEORGE BEECROFT.

Kirkstall-Forge, near Leeds, September 14th, 1831.

£1. per Ton. 1*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	1	–	57	2	17	–	1	–	–	–	3	3	–	–	–	9
2	–	2	–	58	2	18	–	1	1	–	–	3	3	1	–	–	9
3	–	3	–	59	2	19	–	1	2	–	–	3	3	2	–	–	9
4	–	4	–	60	3	–	–	1	3	–	–	3¼	3	3	–	–	9¼
5	–	5	–	61	3	1	–	1	4	–	–	3¼	3	4	–	–	9¼
6	–	6	–	62	3	2	–	1	5	–	–	3½	3	5	–	–	9½
7	–	7	–	63	3	3	–	1	6	–	–	3½	3	6	–	–	9½
8	–	8	–	64	3	4	–	1	7	–	–	3¾	3	7	–	–	9¾
9	–	9	–	65	3	5	–	1	8	–	–	3¾	3	8	–	–	9¾
10	–	10	–	66	3	6	–	1	9	–	–	3¾	3	9	–	–	9¾
11	–	11	–	67	3	7	–	1	10	–	–	4	3	10	–	–	10
12	–	12	–	68	3	8	–	1	11	–	–	4	3	11	–	–	10
13	–	13	–	69	3	9	–	1	12	–	–	4¼	3	12	–	–	10¼
14	–	14	–	70	3	10	–	1	13	–	–	4¼	3	13	–	–	10¼
15	–	15	–	71	3	11	–	1	14	–	–	4½	3	14	–	–	10½
16	–	16	–	72	3	12	–	1	15	–	–	4½	3	15	–	–	10½
17	–	17	–	73	3	13	–	1	16	–	–	4½	3	16	–	–	10½
18	–	18	–	74	3	14	–	1	17	–	–	4¾	3	17	–	–	10¾
19	–	19	–	75	3	15	–	1	18	–	–	4¾	3	18	–	–	10¾
20	1	–	–	76	3	16	–	1	19	–	–	5	3	19	–	–	11
21	1	1	–	77	3	17	–	1	20	–	–	5	3	20	–	–	11
22	1	2	–	78	3	18	–	1	21	–	–	5¼	3	21	–	–	11¼
23	1	3	–	79	3	19	–	1	22	–	–	5¼	3	22	–	–	11¼
24	1	4	–	80	4	–	–	1	23	–	–	5¼	3	23	–	–	11¼
25	1	5	–	81	4	1	–	1	24	–	–	5½	3	24	–	–	11½
26	1	6	–	82	4	2	–	1	25	–	–	5½	3	25	–	–	11½
27	1	7	–	83	4	3	–	1	26	–	–	5¾	3	26	–	–	11¾
28	1	8	–	84	4	4	–	1	27	–	–	5¾	3	27	–	–	11¾
29	1	9	–	85	4	5	–	2	—	–	–	6					
30	1	10	–	86	4	6	–	2	1	–	–	6	0	1	–	–	–
31	1	11	–	87	4	7	–	2	2	–	–	6	0	2	–	–	–
32	1	12	–	88	4	8	–	2	3	–	–	6¼	0	3	–	–	–¼
33	1	13	–	89	4	9	–	2	4	–	–	6¼	0	4	–	–	–¼
34	1	14	–	90	4	10	–	2	5	–	–	6½	0	5	–	–	–½
35	1	15	–	91	4	11	–	2	6	–	–	6½	0	6	–	–	–½
36	1	16	–	92	4	12	–	2	7	–	–	6¾	0	7	–	–	–¾
37	1	17	–	93	4	13	–	2	8	–	–	6¾	0	8	–	–	–¾
38	1	18	–	94	4	14	–	2	9	–	–	6¾	0	9	–	–	–¾
39	1	19	–	95	4	15	–	2	10	–	–	7	0	10	–	–	1
40	2	–	–	96	4	16	–	2	11	–	–	7	0	11	–	–	1
41	2	1	–	97	4	17	–	2	12	–	–	7¼	0	12	–	–	1¼
42	2	2	–	98	4	18	–	2	13	–	–	7¼	0	13	–	–	1¼
43	2	3	–	99	4	19	–	2	14	–	–	7½	0	14	–	–	1½
44	2	4	–	100	5	–	–	2	15	–	–	7½	0	15	–	–	1½
45	2	5	–	200	10	–	–	2	16	–	–	7½	0	16	–	–	1½
46	2	6	–	300	15	–	–	2	17	–	–	7¾	0	17	–	–	1¾
47	2	7	–	400	20	–	–	2	18	–	–	7¾	0	18	–	–	1¾
48	2	8	–	500	25	–	–	2	19	–	–	8	0	19	–	–	2
49	2	9	–	600	30	–	–	2	20	–	–	8	0	20	–	–	2
50	2	10	–	700	35	–	–	2	21	–	–	8¼	0	21	–	–	2¼
51	2	11	–	800	40	–	–	2	22	–	–	8¼	0	22	–	–	2¼
52	2	12	–	900	45	–	–	2	23	–	–	8¼	0	23	–	–	2¼
53	2	13	–	1000	50	–	–	2	24	–	–	8½	0	24	–	–	2½
54	2	14	–	2000	100	–	–	2	25	–	–	8½	0	25	–	–	2½
55	2	15	–	3000	150	–	–	2	26	–	–	8¾	0	26	–	–	2¾
56	2	16	–	4000	200	–	–	2	27	–	–	8¾	0	27	–	–	2¾

1*s*. 3*d*. *per Cwt*.

£1. 5*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	1	3	57	3	11	3	1	–	–	–	3¾	3	–	–	–	11¼
2	–	2	6	58	3	12	6	1	1	–	–	3¾	3	1	–	–	11¼
3	–	3	9	59	3	13	9	1	2	–	–	4	3	2	–	–	11½
4	–	5	–	60	3	15	–	1	3	–	–	4	3	3	–	–	11½
5	–	6	3	61	3	16	3	1	4	–	–	4¼	3	4	–	–	11¾
6	–	7	6	62	3	17	6	1	5	–	–	4¼	3	5	–	–	11¾
7	–	8	9	63	3	18	9	1	6	–	–	4½	3	6	–	1	–
8	–	10	–	64	4	–	–	1	7	–	–	4½	3	7	–	1	–
9	–	11	3	65	4	1	3	1	8	–	–	4¾	3	8	–	1	–¼
10	–	12	6	66	4	2	6	1	9	–	–	4¾	3	9	–	1	–¼
11	–	13	9	67	4	3	9	1	10	–	–	5	3	10	–	1	–½
12	–	15	–	68	4	5	–	1	11	–	–	5	3	11	–	1	–½
13	–	16	3	69	4	6	3	1	12	–	–	5¼	3	12	–	1	–¾
14	–	17	6	70	4	7	6	1	13	–	–	5¼	3	13	–	1	–¾
15	–	18	9	71	4	8	9	1	14	–	–	5½	3	14	–	1	1
16	1	–	–	72	4	10	–	1	15	–	–	5¾	3	15	–	1	1¼
17	1	1	3	73	4	11	3	1	16	–	–	5¾	3	16	–	1	1¼
18	1	2	6	74	4	12	6	1	17	–	–	6	3	17	–	1	1½
19	1	3	9	75	4	13	9	1	18	–	–	6	3	18	–	1	1½
20	1	5	–	76	4	15	–	1	19	–	–	6¼	3	19	–	1	1¾
21	1	6	3	77	4	16	3	1	20	–	–	6¼	3	20	–	1	1¾
22	1	7	6	78	4	17	6	1	21	–	–	6½	3	21	–	1	2
23	1	8	9	79	4	18	9	1	22	–	–	6½	3	22	–	1	2
24	1	10	–	80	5	–	–	1	23	–	–	6¾	3	23	–	1	2¼
25	1	11	3	81	5	1	3	1	24	–	–	6¾	3	24	–	1	2¼
26	1	12	6	82	5	2	6	1	25	–	–	7	3	25	–	1	2½
27	1	13	9	83	5	3	9	1	26	–	–	7	3	26	–	1	2½
28	1	15	–	84	5	5	–	1	27	–	–	7¼	3	27	–	1	2¾
29	1	16	3	85	5	6	3	2	—	–	–	7½					
30	1	17	6	86	5	7	6	2	1	–	–	7½	0	1	–	–	–
31	1	18	9	87	5	8	9	2	2	–	–	7¾	0	2	–	–	–¼
32	2	–	–	88	5	10	–	2	3	–	–	7¾	0	3	–	–	–¼
33	2	1	3	89	5	11	3	2	4	–	–	8	0	4	–	–	–½
34	2	2	6	90	5	12	6	2	5	–	–	8	0	5	–	–	–½
35	2	3	9	91	5	13	9	2	6	–	–	8¼	0	6	–	–	–¾
36	2	5	–	92	5	15	–	2	7	–	–	8¼	0	7	–	–	–¾
37	2	6	3	93	5	16	3	2	8	–	–	8½	0	8	–	–	1
38	2	7	6	94	5	17	6	2	9	–	–	8½	0	9	–	–	1
39	2	8	9	95	5	18	9	2	10	–	–	8¾	0	10	–	–	1¼
40	2	10	–	96	6	–	–	2	11	–	–	8¾	0	11	–	–	1¼
41	2	11	3	97	6	1	3	2	12	–	–	9	0	12	–	–	1½
42	2	12	6	98	6	2	6	2	13	–	–	9	0	13	–	–	1½
43	2	13	9	99	6	3	9	2	14	–	–	9¼	0	14	–	–	1¾
44	2	15	–	100	6	5	–	2	15	–	–	9½	0	15	–	–	2
45	2	16	3	200	12	10	–	2	16	–	–	9½	0	16	–	–	2
46	2	17	6	300	18	15	–	2	17	–	–	9¾	0	17	–	–	2¼
47	2	18	9	400	25	–	–	2	18	–	–	9¾	0	18	–	–	2¼
48	3	–	–	500	31	5	–	2	19	–	–	10	0	19	–	–	2½
49	3	1	3	600	37	10	–	2	20	–	–	10	0	20	–	–	2½
50	3	2	6	700	43	15	–	2	21	–	–	10¼	0	21	–	–	2¾
51	3	3	9	800	50	–	–	2	22	–	–	10¼	0	22	–	–	2¾
52	3	5	–	900	56	5	–	2	23	–	–	10½	0	23	–	–	3
53	3	6	3	1000	62	10	–	2	24	–	–	10½	0	24	–	–	3
54	3	7	6	2000	125	–	–	2	25	–	–	10¾	0	25	–	–	8¼
55	3	8	9	3000	187	10	–	2	26	–	–	10¾	0	26	–	–	3¼
56	3	10	–	4000	250	–	–	2	27	–	–	11	0	27	–	–	3½

1*s.* 6*d. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	1	6	57	4	5	6	1	–	–	–	4½	3	–	–	1	1½
2	–	3	–	58	4	7	–	1	1	–	–	4½	3	1	–	1	1½
3	–	4	6	59	4	8	6	1	2	–	–	4¾	3	2	–	1	1¾
4	–	6	–	60	4	10	–	1	3	–	–	4¾	3	3	–	1	1¾
5	–	7	6	61	4	11	6	1	4	–	–	5	3	4	–	1	2
6	–	9	–	62	4	13	–	1	5	–	–	5¼	3	5	–	1	2¼
7	–	10	6	63	4	14	6	1	6	–	–	5¼	3	6	–	1	2¼
8	–	12	–	64	4	16	–	1	7	–	–	5½	3	7	–	1	2½
9	–	13	6	65	4	17	6	1	8	–	–	5¾	3	8	–	1	2¾
10	–	15	–	66	4	19	–	1	9	–	–	5¾	3	9	–	1	2¾
11	–	16	6	67	5	–	6	1	10	–	–	6	3	10	–	1	3
12	–	18	–	68	5	2	–	1	11	–	–	6¼	3	11	–	1	3¼
13	–	19	6	69	5	3	6	1	12	–	–	6¼	3	12	–	1	3¼
14	1	1	–	70	5	5	–	1	13	–	–	6½	3	13	–	1	3½
15	1	2	6	71	5	6	6	1	14	–	–	6¾	3	14	–	1	3¾
16	1	4	–	72	5	8	–	1	15	–	–	6¾	3	15	–	1	3¾
17	1	5	6	73	5	9	6	1	16	–	–	7	3	16	–	1	4
18	1	7	–	74	5	11	–	1	17	–	–	7	3	17	–	1	4
19	1	8	6	75	5	12	6	1	18	–	–	7¼	3	18	–	1	4¼
20	1	10	–	76	5	14	–	1	19	–	–	7½	3	19	–	1	4½
21	1	11	6	77	5	15	6	1	20	–	–	7½	3	20	–	1	4½
22	1	13	–	78	5	17	–	1	21	–	–	7¾	3	21	–	1	4¾
23	1	14	6	79	5	18	6	1	22	–	–	8	3	22	–	1	5
24	1	16	–	80	6	–	–	1	23	–	–	8	3	23	–	1	5
25	1	17	6	81	6	1	6	1	24	–	–	8¼	3	24	–	1	5¼
26	1	19	–	82	6	3	–	1	25	–	–	8½	3	25	–	1	5½
27	2	–	6	83	6	4	6	1	26	–	–	8½	3	26	–	1	5½
28	2	2	–	84	6	6	–	1	27	–	–	8¾	3	27	–	1	5¾
29	2	3	6	85	6	7	6	2	—	–	–	9					
30	2	5	–	86	6	9	–	2	1	–	–	9	0	1	–	–	–
31	2	6	6	87	6	10	6	2	2	–	–	9¼	0	2	–	–	–¼
32	2	8	–	88	6	12	–	2	3	–	–	9¼	0	3	–	–	–¼
33	2	9	6	89	6	13	6	2	4	–	–	9½	0	4	–	–	–½
34	2	11	–	90	6	15	–	2	5	–	–	9¾	0	5	–	–	–¾
35	2	12	6	91	6	16	6	2	6	–	–	9¾	0	6	–	–	–¾
36	2	14	–	92	6	18	–	2	7	–	–	10	0	7	–	–	1
37	2	15	6	93	6	19	6	2	8	–	–	10¼	0	8	–	–	1¼
38	2	17	–	94	7	1	–	2	9	–	–	10¼	0	9	–	–	1¼
39	2	18	6	95	7	2	6	2	10	–	–	10½	0	10	–	–	1½
40	3	–	–	96	7	4	–	2	11	–	–	10¾	0	11	–	–	1¾
41	3	1	6	97	7	5	6	2	12	–	–	10¾	0	12	–	–	1¾
42	3	3	–	98	7	7	–	2	13	–	–	11	0	13	–	–	2
43	3	4	6	99	7	8	6	2	14	–	–	11¼	0	14	–	–	2¼
44	3	6	–	100	7	10	–	2	15	–	–	11¼	0	15	–	–	2¼
45	3	7	6	200	15	–	–	2	16	–	–	11½	0	16	–	–	2½
46	3	9	–	300	22	10	–	2	17	–	–	11½	0	17	–	–	2½
47	3	10	6	400	30	–	–	2	18	–	–	11¾	0	18	–	–	2¾
48	3	12	–	500	37	10	–	2	19	–	1	–	0	19	–	–	3
49	3	13	6	600	45	–	–	2	20	–	1	–	0	20	–	–	3
50	3	15	–	700	52	10	–	2	21	–	1	–¼	0	21	–	–	3¼
51	3	16	6	800	60	–	–	2	22	–	1	–½	0	22	–	–	3½
52	3	18	–	900	67	10	–	2	23	–	1	–½	0	23	–	–	3½
53	3	19	6	1000	75	–	–	2	24	–	1	–¾	0	24	–	–	3¾
54	4	1	–	2000	150	–	–	2	25	–	1	1	0	25	–	–	4
55	4	2	6	3000	225	–	–	2	26	–	1	1	0	26	–	–	4
56	4	4	–	4000	300	–	–	2	27	–	1	1¼	0	27	–	–	4¼

1*s*. 9*d*. *per Cwt*. £1. 15*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	1	9	57	4	19	9	1	–	–	–	5¼	3	–	–	1	3¾
2	–	3	6	58	5	1	6	1	1	–	–	5¼	3	1	–	1	3¾
3	–	5	3	59	5	3	3	1	2	–	–	5½	3	2	–	1	4
4	–	7	–	60	5	5	–	1	3	–	–	5¾	3	3	–	1	4¼
5	–	8	9	61	5	6	9	1	4	–	–	6	3	4	–	1	4½
6	–	10	6	62	5	8	6	1	5	–	–	6	3	5	–	1	4½
7	–	12	3	63	5	10	3	1	6	–	–	6¼	3	6	–	1	4¾
8	–	14	–	64	5	12	–	1	7	–	–	6½	3	7	–	1	5
9	–	15	9	65	5	13	9	1	8	–	–	6¾	3	8	–	1	5¼
10	–	17	6	66	5	15	6	1	9	–	–	6¾	3	9	–	1	5¼
11	–	19	3	67	5	17	3	1	10	–	–	7	3	10	–	1	5½
12	1	1	–	68	5	19	–	1	11	–	–	7¼	3	11	–	1	5¾
13	1	2	9	69	6	–	9	1	12	–	–	7½	3	12	–	1	6
14	1	4	6	70	6	2	6	1	13	–	–	7½	3	13	–	1	6
15	1	6	3	71	6	4	3	1	14	–	–	7¾	3	14	–	1	6¼
16	1	8	–	72	6	6	–	1	15	–	–	8	3	15	–	1	6½
17	1	9	9	73	6	7	9	1	16	–	–	8¼	3	16	–	1	6¾
18	1	11	6	74	6	9	6	1	17	–	–	8¼	3	17	–	1	6¾
19	1	13	3	75	6	11	3	1	18	–	–	8½	3	18	–	1	7
20	1	15	–	76	6	13	–	1	19	–	–	8¾	3	19	–	1	7¼
21	1	16	9	77	6	14	9	1	20	–	–	9	3	20	–	1	7½
22	1	18	6	78	6	16	6	1	21	–	–	9	3	21	–	1	7½
23	2	–	3	79	6	18	3	1	22	–	–	9¼	3	22	–	1	7¾
24	2	2	–	80	7	–	–	1	23	–	–	9½	3	23	–	1	8
25	2	3	9	81	7	1	9	1	24	–	–	9¾	3	24	–	1	8¼
26	2	5	6	82	7	3	6	1	25	–	–	9¾	3	25	–	1	8¼
27	2	7	3	83	7	5	3	1	26	–	–	10	3	26	–	1	8½
28	2	9	–	84	7	7	–	1	27	–	–	10¼	3	27	–	1	8¾
29	2	10	9	85	7	8	9	2	—	–	–	10½					
30	2	12	6	86	7	10	6	2	1	–	–	10½	0	1	–	–	–
31	2	14	3	87	7	12	3	2	2	–	–	10¾	0	2	–	–	–¼
32	2	16	–	88	7	14	–	2	3	–	–	11	0	3	–	–	–½
33	2	17	9	89	7	15	9	2	4	–	–	11¼	0	4	–	–	–¾
34	2	19	6	90	7	17	6	2	5	–	–	11¼	0	5	–	–	–¾
35	3	1	3	91	7	19	3	2	6	–	–	11½	0	6	–	–	1
36	3	3	–	92	8	1	–	2	7	–	–	11¾	0	7	–	–	1¼
37	3	4	9	93	8	2	9	2	8	–	1	–	0	8	–	–	1½
38	3	6	6	94	8	4	6	2	9	–	1	–	0	9	–	–	1½
39	3	8	3	95	8	6	3	2	10	–	1	–¼	0	10	–	–	1¾
40	3	10	–	96	8	8	–	2	11	–	1	–½	0	11	–	–	2
41	3	11	9	97	8	9	9	2	12	–	1	–¾	0	12	–	–	2¼
42	3	13	6	98	8	11	6	2	13	–	1	–¾	0	13	–	–	2¼
43	3	15	3	99	8	13	3	2	14	–	1	1	0	14	–	–	2½
44	3	17	–	100	8	15	–	2	15	–	1	1¼	0	15	–	–	2¾
45	3	18	9	200	17	10	–	2	16	–	1	1½	0	16	–	–	3
46	4	–	6	300	26	5	–	2	17	–	1	1½	0	17	–	–	3
47	4	2	3	400	35	–	–	2	18	–	1	1¾	0	18	–	–	3¼
48	4	4	–	500	43	15	–	2	19	–	1	2	0	19	–	–	3½
49	4	5	9	600	52	10	–	2	20	–	1	2¼	0	20	–	–	3¾
50	4	7	6	700	61	5	–	2	21	–	1	2¼	0	21	–	–	3¾
51	4	9	3	800	70	–	–	2	22	–	1	2½	0	22	–	–	4
52	4	11	–	900	78	15	–	2	23	–	1	2¾	0	23	–	–	4¼
53	4	12	9	1000	87	10	–	2	24	–	1	3	0	24	–	–	4½
54	4	14	6	2000	175	–	–	2	25	–	1	3	0	25	–	–	4½
55	4	16	3	3000	262	10	–	2	26	–	1	3¼	0	26	–	–	4¾
56	4	18	–	4000	350	–	–	2	27	–	1	3½	0	27	–	–	5

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	2	–	57	5	14	–	1	–	–	–	6	3	–	–	1	6
2	–	4	–	58	5	16	–	1	1	–	–	6	3	1	–	1	6
3	–	6	–	59	5	18	–	1	2	–	–	6¼	3	2	–	1	6¼
4	–	8	–	60	6	–	–	1	3	–	–	6½	3	3	–	1	6½
5	–	10	–	61	6	2	–	1	4	–	–	6¾	3	4	–	1	6¾
6	–	12	–	62	6	4	–	1	5	–	–	7	3	5	–	1	7
7	–	14	–	63	6	6	–	1	6	–	–	7¼	3	6	–	1	7¼
8	–	16	–	64	6	8	–	1	7	–	–	7½	3	7	–	1	7½
9	–	18	–	65	6	10	–	1	8	–	–	7½	3	8	–	1	7½
10	1	–	–	66	6	12	–	1	9	–	–	7¾	3	9	–	1	7¾
11	1	2	–	67	6	14	–	1	10	–	–	8	3	10	–	1	8
12	1	4	–	68	6	16	–	1	11	–	–	8¼	3	11	–	1	8¼
13	1	6	–	69	6	18	–	1	12	–	–	8½	3	12	–	1	8½
14	1	8	–	70	7	–	–	1	13	–	–	8¾	3	13	–	1	8¾
15	1	10	–	71	7	2	–	1	14	–	–	9	3	14	–	1	9
16	1	12	–	72	7	4	–	1	15	–	–	9	3	15	–	1	9
17	1	14	–	73	7	6	–	1	16	–	–	9¼	3	16	–	1	9¼
18	1	16	–	74	7	8	–	1	17	–	–	9½	3	17	–	1	9½
19	1	18	–	75	7	10	–	1	18	–	–	9¾	3	18	–	1	9¾
20	2	–	–	76	7	12	–	1	19	–	–	10	3	19	–	1	10
21	2	2	–	77	7	14	–	1	20	–	–	10¼	3	20	–	1	10¼
22	2	4	–	78	7	16	–	1	21	–	–	10½	3	21	–	1	10½
23	2	6	–	79	7	18	–	1	22	–	–	10½	3	22	–	1	10½
24	2	8	–	80	8	–	–	1	23	–	–	10¾	3	23	–	1	10¾
25	2	10	–	81	8	2	–	1	24	–	–	11	3	24	–	1	11
26	2	12	–	82	8	4	–	1	25	–	–	11¼	3	25	–	1	11¼
27	2	14	–	83	8	6	–	1	26	–	–	11½	3	26	–	1	11½
28	2	16	–	84	8	8	–	1	27	–	–	11¾	3	27	–	1	11¾
29	2	18	–	85	8	10	–	2	—	–	1	–					
30	3	–	–	86	8	12	–	2	1	–	1	–	0	1	–	–	–
31	3	2	–	87	8	14	–	2	2	–	1	–¼	0	2	–	–	–¼
32	3	4	–	88	8	16	–	2	3	–	1	–½	0	3	–	–	–½
33	3	6	–	89	8	18	–	2	4	–	1	–¾	0	4	–	–	–¾
34	3	8	–	90	9	–	–	2	5	–	1	1	0	5	–	–	1
35	3	10	–	91	9	2	–	2	6	–	1	1¼	0	6	–	–	1¼
36	3	12	–	92	9	4	–	2	7	–	1	1½	0	7	–	–	1½
37	3	14	–	93	9	6	–	2	8	–	1	1½	0	8	–	–	1½
38	3	16	–	94	9	8	–	2	9	–	1	1¾	0	9	–	–	1¾
39	3	18	–	95	9	10	–	2	10	–	1	2	0	10	–	–	2
40	4	–	–	96	9	12	–	2	11	–	1	2¼	0	11	–	–	2¼
41	4	2	–	97	9	14	–	2	12	–	1	2½	0	12	–	–	2½
42	4	4	–	98	9	16	–	2	13	–	1	2¾	0	13	–	–	2¾
43	4	6	–	99	9	18	–	2	14	–	1	3	0	14	–	–	3
44	4	8	–	100	10	–	–	2	15	–	1	3	0	15	–	–	3
45	4	10	–	200	20	–	–	2	16	–	1	3¼	0	16	–	–	3¼
46	4	12	–	300	30	–	–	2	17	–	1	3½	0	17	–	–	3½
47	4	14	–	400	40	–	–	2	18	–	1	3¾	0	18	–	–	3¾
48	4	16	–	500	50	–	–	2	19	–	1	4	0	19	–	–	4
49	4	18	–	600	60	–	–	2	20	–	1	4¼	0	20	–	–	4¼
50	5	–	–	700	70	–	–	2	21	–	1	4½	0	21	–	–	4½
51	5	2	–	800	80	–	–	2	22	–	1	4½	0	22	–	–	4½
52	5	4	–	900	90	–	–	2	23	–	1	4¾	0	23	–	–	4¾
53	5	6	–	1000	100	–	–	2	24	–	1	5	0	24	–	–	5
54	5	8	–	2000	200	–	–	2	25	–	1	5¼	0	25	–	–	5¼
55	5	10	–	3000	300	–	–	2	26	–	1	5½	0	26	–	–	5½
56	5	12	–	4000	400	–	–	2	27	–	1	5¾	0	27	–	–	5¾

2s. 3d. per Cwt. *£2. 5s. per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	2	3	57	6	8	3	1	–	–	–	6¾	3	–	–	1	8¼
2	–	4	6	58	6	10	6	1	1	–	–	6¾	3	1	–	1	8¼
3	–	6	9	59	6	12	9	1	2	–	–	7	3	2	–	1	8½
4	–	9	–	60	6	15	–	1	3	–	–	7¼	3	3	–	1	8¾
5	–	11	3	61	6	17	3	1	4	–	–	7½	3	4	–	1	9
6	–	13	6	62	6	19	6	1	5	–	–	7¾	3	5	–	1	9¼
7	–	15	9	63	7	1	9	1	6	–	–	8	3	6	–	1	9½
8	–	18	–	64	7	4	–	1	7	–	–	8¼	3	7	–	1	9¾
9	1	–	3	65	7	6	3	1	8	–	–	8½	3	8	–	1	10
10	1	2	6	66	7	8	6	1	9	–	–	8¾	3	9	–	1	10¼
11	1	4	9	67	7	10	9	1	10	–	–	9	3	10	–	1	10½
12	1	7	–	68	7	13	–	1	11	–	–	9¼	3	11	–	1	10¾
13	1	9	3	69	7	15	3	1	12	–	–	9½	3	12	–	1	11
14	1	11	6	70	7	17	6	1	13	–	–	9¾	3	13	–	1	11¼
15	1	13	9	71	7	19	9	1	14	–	–	10	3	14	–	1	11½
16	1	16	–	72	8	2	–	1	15	–	–	10¼	3	15	–	1	11¾
17	1	18	3	73	8	4	3	1	16	–	–	10½	3	16	–	2	–
18	2	–	6	74	8	6	6	1	17	–	–	10¾	3	17	–	2	–¼
19	2	2	9	75	8	8	9	1	18	–	–	11	3	18	–	2	–½
20	2	5	–	76	8	11	–	1	19	–	–	11¼	3	19	–	2	–¾
21	2	7	3	77	8	13	3	1	20	–	–	11½	3	20	–	2	1
22	2	9	6	78	8	15	6	1	21	–	–	11¾	3	21	–	2	1¼
23	2	11	9	79	8	17	9	1	22	–	1	–	3	22	–	2	1½
24	2	14	–	80	9	–	–	1	23	–	1	–¼	3	23	–	2	1¾
25	2	16	3	81	9	2	3	1	24	–	1	–½	3	24	–	2	2
26	2	18	6	82	9	4	6	1	25	–	1	–¾	3	25	–	2	2¼
27	3	–	9	83	9	6	9	1	26	–	1	1	3	26	–	2	2½
28	3	3	–	84	9	9	–	1	27	–	1	1¼	3	27	–	2	2¾
29	3	5	3	85	9	11	3	2	—	–	1	1½					
30	3	7	6	86	9	13	6	2	1	–	1	1½	0	1	–	–	–
31	3	9	9	87	9	15	9	2	2	–	1	1¾	0	2	–	–	–¼
32	3	12	–	88	9	18	–	2	3	–	1	2	0	3	–	–	–½
33	3	14	3	89	10	–	3	2	4	–	1	2¼	0	4	–	–	–¾
34	3	16	6	90	10	2	6	2	5	–	1	2½	0	5	–	–	1
35	3	18	9	91	10	4	9	2	6	–	1	2¾	0	6	–	–	1¼
36	4	1	–	92	10	7	–	2	7	–	1	3	0	7	–	–	1½
37	4	3	3	93	10	9	3	2	8	–	1	3¼	0	8	–	–	1¾
38	4	5	6	94	10	11	6	2	9	–	1	3½	0	9	–	–	2
39	4	7	9	95	10	13	9	2	10	–	1	3¾	0	10	–	–	2¼
40	4	10	–	96	10	16	–	2	11	–	1	4	0	11	–	–	2½
41	4	12	3	97	10	18	3	2	12	–	1	4¼	0	12	–	–	2¾
42	4	14	6	98	11	–	6	2	13	–	1	4½	0	13	–	–	3
43	4	16	9	99	11	2	9	2	14	–	1	4¾	0	14	–	–	3¼
44	4	19	–	100	11	5	–	2	15	–	1	5	0	15	–	–	3½
45	5	1	3	200	22	10	–	2	16	–	1	5¼	0	16	–	–	3¾
46	5	3	6	300	33	15	–	2	17	–	1	5½	0	17	–	–	4
47	5	5	9	400	45	–	–	2	18	–	1	5¾	0	18	–	–	4¼
48	5	8	–	500	56	5	–	2	19	–	1	6	0	19	–	–	4½
49	5	10	3	600	67	10	–	2	20	–	1	6¼	0	20	–	–	4¾
50	5	12	6	700	78	15	–	2	21	–	1	6½	0	21	–	–	5
51	5	14	9	800	90	–	–	2	22	–	1	6¾	0	22	–	–	5¼
52	5	17	–	900	101	5	–	2	23	–	1	7	0	23	–	–	5½
53	5	19	3	1000	112	10	–	2	24	–	1	7¼	0	24	–	–	5¾
54	6	1	6	2000	225	–	–	2	25	–	1	7½	0	25	–	–	6
55	6	3	9	3000	337	10	–	2	26	–	1	7¾	0	26	–	–	6¼
56	6	6	–	4000	450	–	–	2	27	–	1	8	0	27	–	–	6½

£2. 6s. 8d. per Ton. ¼ per lb. 2s. 4d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	2	4	57	6	13	–	1	–	–	–	7	3	–	–	1	9
2	–	4	8	58	6	15	4	1	1	–	–	7¼	3	1	–	1	9¼
3	–	7	–	59	6	17	8	1	2	–	–	7½	3	2	–	1	9½
4	–	9	4	60	7	–	–	1	3	–	–	7¾	3	3	–	1	9¾
5	–	11	8	61	7	2	4	1	4	–	–	8	3	4	–	1	10
6	–	14	–	62	7	4	8	1	5	–	–	8¼	3	5	–	1	10¼
7	–	16	4	63	7	7	–	1	6	–	–	8½	3	6	–	1	10½
8	–	18	8	64	7	9	4	1	7	–	–	8¾	3	7	–	1	10¾
9	1	1	–	65	7	11	8	1	8	–	–	9	3	8	–	1	11
10	1	3	4	66	7	14	–	1	9	–	–	9¼	3	9	–	1	11¼
11	1	5	8	67	7	16	4	1	10	–	–	9½	3	10	–	1	11½
12	1	8	–	68	7	18	8	1	11	–	–	9¾	3	11	–	1	11¾
13	1	10	4	69	8	1	–	1	12	–	–	10	3	12	–	2	–
14	1	12	8	70	8	3	4	1	13	–	–	10¼	3	13	–	2	–¼
15	1	15	–	71	8	5	8	1	14	–	–	10½	3	14	–	2	–½
16	1	17	4	72	8	8	–	1	15	–	–	10¾	3	15	–	2	–¾
17	1	19	8	73	8	10	4	1	16	–	–	11	3	16	–	2	1
18	2	2	–	74	8	12	8	1	17	–	–	11¼	3	17	–	2	1¼
19	2	4	4	75	8	15	–	1	18	–	–	11½	3	18	–	2	1½
20	2	6	8	76	8	17	4	1	19	–	–	11¾	3	19	–	2	1¾
21	2	9	–	77	8	19	8	1	20	–	1	–	3	20	–	2	2
22	2	11	4	78	9	2	–	1	21	–	1	–¼	3	21	–	2	2¼
23	2	13	8	79	9	4	4	1	22	–	1	–½	3	22	–	2	2½
24	2	16	–	80	9	6	8	1	23	–	1	–¾	3	23	–	2	2¾
25	2	18	4	81	9	9	–	1	24	–	1	1	3	24	–	2	3
26	3	–	8	82	9	11	4	1	25	–	1	1¼	3	25	–	2	3¼
27	3	3	–	83	9	13	8	1	26	–	1	1½	3	26	–	2	3½
28	3	5	4	84	9	16	–	1	27	–	1	1¾	3	27	–	2	3¾
29	3	7	8	85	9	18	4	2	—	–	1	2					
30	3	10	–	86	10	–	8	2	1	–	1	2¼	0	1	–	–	–¼
31	3	12	4	87	10	3	–	2	2	–	1	2½	0	2	–	–	–½
32	3	14	8	88	10	5	4	2	3	–	1	2¾	0	3	–	–	–¾
33	3	17	–	89	10	7	8	2	4	–	1	3	0	4	–	–	1
34	3	19	4	90	10	10	–	2	5	–	1	3¼	0	5	–	–	1¼
35	4	1	8	91	10	12	4	2	6	–	1	3½	0	6	–	–	1½
36	4	4	–	92	10	14	8	2	7	–	1	3¾	0	7	–	–	1¾
37	4	6	4	93	10	17	–	2	8	–	1	4	0	8	–	–	2
38	4	8	8	94	10	19	4	2	9	–	1	4¼	0	9	–	–	2¼
39	4	11	–	95	11	1	8	2	10	–	1	4½	0	10	–	–	2½
40	4	13	4	96	11	4	–	2	11	–	1	4¾	0	11	–	–	2¾
41	4	15	8	97	11	6	4	2	12	–	1	5	0	12	–	–	3
42	4	18	–	98	11	8	8	2	13	–	1	5¼	0	13	–	–	3¼
43	5	–	4	99	11	11	–	2	14	–	1	5½	0	14	–	–	3½
44	5	2	8	100	11	13	4	2	15	–	1	5¾	0	15	–	–	3¾
45	5	5	–	200	23	6	8	2	16	–	1	6	0	16	–	–	4
46	5	7	4	300	35	–	–	2	17	–	1	6¼	0	17	–	–	4¼
47	5	9	8	400	46	13	4	2	18	–	1	6½	0	18	–	–	4½
48	5	12	–	500	58	6	8	2	19	–	1	6¾	0	19	–	–	4¾
49	5	14	4	600	70	–	–	2	20	–	1	7	0	20	–	–	5
50	5	16	8	700	81	13	4	2	21	–	1	7¼	0	21	–	–	5¼
51	5	19	–	800	93	6	8	2	22	–	1	7½	0	22	–	–	5½
52	6	1	4	900	105	–	–	2	23	–	1	7¾	0	23	–	–	5¾
53	6	3	8	1000	116	13	4	2	24	–	1	8	0	24	–	–	6
54	6	6	–	2000	233	6	8	2	25	–	1	8¼	0	25	–	–	6¼
55	6	8	4	3000	350	–	–	2	26	–	1	8½	0	26	–	–	6½
56	6	10	8	4000	466	13	4	2	27	–	1	8¾	0	27	–	–	6¾

2*s*. 6*d*. *per Cwt*.

£2. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	2	6	57	7	2	6	1	–	–	–	7½	3	–	–	1	10½
2	–	5	–	58	7	5	–	1	1	–	–	7¾	3	1	–	1	10¾
3	–	7	6	59	7	7	6	1	2	–	–	8	3	2	–	1	11
4	–	10	–	60	7	10	–	1	3	–	–	8¼	3	3	–	1	11¼
5	–	12	6	61	7	12	6	1	4	–	–	8½	3	4	–	1	11½
6	–	15	–	62	7	15	–	1	5	–	–	8¾	3	5	–	1	11¾
7	–	17	6	63	7	17	6	1	6	–	–	9	3	6	–	2	–
8	1	–	–	64	8	–	–	1	7	–	–	9¼	3	7	–	2	–¼
9	1	2	6	65	8	2	6	1	8	–	–	9½	3	8	–	2	–½
10	1	5	–	66	8	5	–	1	9	–	–	9¾	3	9	–	2	–¾
11	1	7	6	67	8	7	6	1	10	–	–	10	3	10	–	2	1
12	1	10	–	68	8	10	–	1	11	–	–	10¼	3	11	–	2	1¼
13	1	12	6	69	8	12	6	1	12	–	–	10½	3	12	–	2	1½
14	1	15	–	70	8	15	–	1	13	–	–	10¾	3	13	–	2	1¾
15	1	17	6	71	8	17	6	1	14	–	–	11¼	3	14	–	2	2¼
16	2	–	–	72	9	–	–	1	15	–	–	11½	3	15	–	2	2½
17	2	2	6	73	9	2	6	1	16	–	–	11¾	3	16	–	2	2¾
18	2	5	–	74	9	5	–	1	17	–	1	–	3	17	–	2	3
19	2	7	6	75	9	7	6	1	18	–	1	–¼	3	18	–	2	3¼
20	2	10	–	76	9	10	–	1	19	–	1	–½	3	19	–	2	3½
21	2	12	6	77	9	12	6	1	20	–	1	–¾	3	20	–	2	3¾
22	2	15	–	78	9	15	–	1	21	–	1	1	3	21	–	2	4
23	2	17	6	79	9	17	6	1	22	–	1	1¼	3	22	–	2	4¼
24	3	–	–	80	10	–	–	1	23	–	1	1½	3	23	–	2	4½
25	3	2	6	81	10	2	6	1	24	–	1	1¾	3	24	–	2	4¾
26	3	5	–	82	10	5	–	1	25	–	1	2	3	25	–	2	5
27	3	7	6	83	10	7	6	1	26	–	1	2¼	3	26	–	2	5¼
28	3	10	–	84	10	10	–	1	27	–	1	2½	3	27	–	2	5½
29	3	12	6	85	10	12	6	2	—	–	1	3					
30	3	15	–	86	10	15	–	2	1	–	1	3¼	0	1	–	–	–¼
31	3	17	6	87	10	17	6	2	2	–	1	3½	0	2	–	–	–½
32	4	–	–	88	11	–	–	2	3	–	1	3¾	0	3	–	–	–¾
33	4	2	6	89	11	2	6	2	4	–	1	4	0	4	–	–	1
34	4	5	–	90	11	5	–	2	5	–	1	4¼	0	5	–	–	1¼
35	4	7	6	91	11	7	6	2	6	–	1	4½	0	6	–	–	1½
36	4	10	–	92	11	10	–	2	7	–	1	4¾	0	7	–	–	1¾
37	4	12	6	93	11	12	6	2	8	–	1	5	0	8	–	–	2
38	4	15	–	94	11	15	–	2	9	–	1	5¼	0	9	–	–	2¼
39	4	17	6	95	11	17	6	2	10	–	1	5½	0	10	–	–	2½
40	5	–	–	96	12	–	–	2	11	–	1	5¾	0	11	–	–	2¾
41	5	2	6	97	12	2	6	2	12	–	1	6	0	12	–	–	3
42	5	5	–	98	12	5	–	2	13	–	1	6¼	0	13	–	–	3¼
43	5	7	6	99	12	7	6	2	14	–	1	6¾	0	14	–	–	3¾
44	5	10	–	100	12	10	–	2	15	–	1	7	0	15	–	–	4
45	5	12	6	200	25	–	–	2	16	–	1	7¼	0	16	–	–	4¼
46	5	15	–	300	37	10	–	2	17	–	1	7½	0	17	–	–	4½
47	5	17	6	400	50	–	–	2	18	–	1	7¾	0	18	–	–	4¾
48	6	–	–	500	62	10	–	2	19	–	1	8	0	19	–	–	5
49	6	2	6	600	75	–	–	2	20	–	1	8¼	0	20	–	–	5¼
50	6	5	–	700	87	10	–	2	21	–	1	8½	0	21	–	–	5½
51	6	7	6	800	100	–	–	2	22	–	1	8¾	0	22	–	–	5¾
52	6	10	–	900	112	10	–	2	23	–	1	9	0	23	–	–	6
53	6	12	6	1000	125	–	–	2	24	–	1	9¼	0	24	–	–	6¼
54	6	15	–	2000	250	–	–	2	25	–	1	9½	0	25	–	–	6½
55	6	17	6	3000	375	–	–	2	26	–	1	9¾	0	26	–	–	6¾
56	7	–	–	4000	500	–	–	2	27	–	1	10	0	27	–	–	7

2s. 9d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	2	9	57	7	16	9	1	–	–	–	8¼	3	–	–	2	–¾
2	–	5	6	58	7	19	6	1	1	–	–	8½	3	1	–	2	1
3	–	8	3	59	8	2	3	1	2	–	–	8¾	3	2	–	2	1¼
4	–	11	–	60	8	5	–	1	3	–	–	9	3	3	–	2	1½
5	–	13	9	61	8	7	9	1	4	–	–	9¼	3	4	–	2	1¾
6	–	16	6	62	8	10	6	1	5	–	–	9½	3	5	–	2	2
7	–	19	3	63	8	13	3	1	6	–	–	10	3	6	–	2	2¼
8	1	2	–	64	8	16	–	1	7	–	–	10¼	3	7	–	2	2¾
9	1	4	9	65	8	18	9	1	8	–	–	10½	3	8	–	2	3
10	1	7	6	66	9	1	6	1	9	–	–	10¾	3	9	–	2	3¼
11	1	10	3	67	9	4	3	1	10	–	–	11	3	10	–	2	3½
12	1	13	–	68	9	7	–	1	11	–	–	11¼	3	11	–	2	3¾
13	1	15	9	69	9	9	9	1	12	–	–	11¾	3	12	–	2	4¼
14	1	18	6	70	9	12	6	1	13	–	1	–	3	13	–	2	4½
15	2	1	3	71	9	15	3	1	14	–	1	–¼	3	14	–	2	4¾
16	2	4	–	72	9	18	–	1	15	–	1	–½	3	15	–	2	5
17	2	6	9	73	10	–	9	1	16	–	1	–¾	3	16	–	2	5¼
18	2	9	6	74	10	3	6	1	17	–	1	1¼	3	17	–	2	5¾
19	2	12	3	75	10	6	3	1	18	–	1	1½	3	18	–	2	6
20	2	15	–	76	10	9	–	1	19	–	1	1¾	3	19	–	2	6¼
21	2	17	9	77	10	11	9	1	20	–	1	2	3	20	–	2	6½
22	3	–	6	78	10	14	6	1	21	–	1	2¼	3	21	–	2	6¾
23	3	3	3	79	10	17	3	1	22	–	1	2½	3	22	–	2	7
24	3	6	–	80	11	–	–	1	23	–	1	3	3	23	–	2	7½
25	3	8	9	81	11	2	9	1	24	–	1	3¼	3	24	–	2	7¾
26	3	11	6	82	11	5	6	1	25	–	1	3½	3	25	–	2	8
27	3	14	3	83	11	8	3	1	26	–	1	3¾	3	26	–	2	8¼
28	3	17	–	84	11	11	–	1	27	–	1	4	3	27	–	2	8½
29	3	19	9	85	11	13	9	2	—	–	1	4½					
30	4	2	6	86	11	16	6	2	1	–	1	4¾	0	1	–	–	–¼
31	4	5	3	87	11	19	3	2	2	–	1	5	0	2	–	–	–½
32	4	8	–	88	12	2	–	2	3	–	1	5¼	0	3	–	–	–¾
33	4	10	9	89	12	4	9	2	4	–	1	5½	0	4	–	–	1
34	4	13	6	90	12	7	6	2	5	–	1	5¾	0	5	–	–	1¼
35	4	16	3	91	12	10	3	2	6	–	1	6¼	0	6	–	–	1¾
36	4	19	–	92	12	13	–	2	7	–	1	6½	0	7	–	–	2
37	5	1	9	93	12	15	9	2	8	–	1	6¾	0	8	–	–	2¼
38	5	4	6	94	12	18	6	2	9	–	1	7	0	9	–	–	2½
39	5	7	3	95	13	1	3	2	10	–	1	7¼	0	10	–	–	2¾
40	5	10	–	96	13	4	–	2	11	–	1	7½	0	11	–	–	3
41	5	12	9	97	13	6	9	2	12	–	1	8	0	12	–	–	3½
42	5	15	6	98	13	9	6	2	13	–	1	8¼	0	13	–	–	3¾
43	5	18	3	99	13	12	3	2	14	–	1	8½	0	14	–	–	4
44	6	1	–	100	13	15	–	2	15	–	1	8¾	0	15	–	–	4¼
45	6	3	9	200	27	10	–	2	16	–	1	9	0	16	–	–	4½
46	6	6	6	300	41	5	–	2	17	–	1	9½	0	17	–	–	5
47	6	9	3	400	55	–	–	2	18	–	1	9¾	0	18	–	–	5¼
48	6	12	–	500	68	15	–	2	19	–	1	10	0	19	–	–	5½
49	6	14	9	600	82	10	–	2	20	–	1	10¼	0	20	–	–	5¾
50	6	17	6	700	96	5	–	2	21	–	1	10½	0	21	–	–	6
51	7	–	3	800	110	–	–	2	22	–	1	10¾	0	22	–	–	6¼
52	7	3	–	900	123	15	–	2	23	–	1	11¼	0	23	–	–	6¾
53	7	5	9	1000	137	10	–	2	24	–	1	11½	0	24	–	–	7
54	7	8	6	2000	275	–	–	2	25	–	1	11¾	0	25	–	–	7¼
55	7	11	3	3000	412	10	–	2	26	–	2	–	0	26	–	–	7½
56	7	14	–	4000	550	–	–	2	27	–	2	–¼	0	27	–	–	7¾

3*s*. *per Cwt.*

£3. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	3	–	57	8	11	–	1	–	–	–	9	3	–	–	2	3
2	–	6	–	58	8	14	–	1	1	–	–	9¼	3	1	–	2	3¼
3	–	9	–	59	8	17	–	1	2	–	–	9½	3	2	–	2	3½
4	–	12	–	60	9	–	–	1	3	–	–	9¾	3	3	–	2	3¾
5	–	15	–	61	9	3	–	1	4	–	–	10¼	3	4	–	2	4¼
6	–	18	–	62	9	6	–	1	5	–	–	10½	3	5	–	2	4½
7	1	1	–	63	9	9	–	1	6	–	–	10¾	3	6	–	2	4¾
8	1	4	–	64	9	12	–	1	7	–	–	11¼	3	7	–	2	5¼
9	1	7	–	65	9	15	–	1	8	–	–	11½	3	8	–	2	5½
10	1	10	–	66	9	18	–	1	9	–	–	11¾	3	9	–	2	5¾
11	1	13	–	67	10	1	–	1	10	–	1	–	3	10	–	2	6
12	1	16	–	68	10	4	–	1	11	–	1	–½	3	11	–	2	6½
13	1	19	–	69	10	7	–	1	12	–	1	–¾	3	12	–	2	6¾
14	2	2	–	70	10	10	–	1	13	–	1	1	3	13	–	2	7
15	2	5	–	71	10	13	–	1	14	–	1	1½	3	14	–	2	7½
16	2	8	–	72	10	16	–	1	15	–	1	1¾	3	15	–	2	7¾
17	2	11	–	73	10	19	–	1	16	–	1	2	3	16	–	2	8
18	2	14	–	74	11	2	–	1	17	–	1	2¼	3	17	–	2	8¼
19	2	17	–	75	11	5	–	1	18	–	1	2¾	3	18	–	2	8¾
20	3	–	–	76	11	8	–	1	19	–	1	3	3	19	–	2	9
21	3	3	–	77	11	11	–	1	20	–	1	3¼	3	20	–	2	9¼
22	3	6	–	78	11	14	–	1	21	–	1	3¾	3	21	–	2	9¾
23	3	9	–	79	11	17	–	1	22	–	1	4	3	22	–	2	10
24	3	12	–	80	12	–	–	1	23	–	1	4¼	3	23	–	2	10¼
25	3	15	–	81	12	3	–	1	24	–	1	4½	3	24	–	2	10½
26	3	18	–	82	12	6	–	1	25	–	1	5	3	25	–	2	11
27	4	1	–	83	12	9	–	1	26	–	1	5¼	3	26	–	2	11¼
28	4	4	–	84	12	12	–	1	27	–	1	5½	3	27	–	2	11½
29	4	7	–	85	12	15	–	2	—	–	1	6					
30	4	10	–	86	12	18	–	2	1	–	1	6¼	0	1	–	–	–¼
31	4	13	–	87	13	1	–	2	2	–	1	6½	0	2	–	–	–½
32	4	16	–	88	13	4	–	2	3	–	1	6¾	0	3	–	–	–¾
33	4	19	–	89	13	7	–	2	4	–	1	7¼	0	4	–	–	1¼
34	5	2	–	90	13	10	–	2	5	–	1	7½	0	5	–	–	1½
35	5	5	–	91	13	13	–	2	6	–	1	7¾	0	6	–	–	1¾
36	5	8	–	92	13	16	–	2	7	–	1	8¼	0	7	–	–	2¼
37	5	11	–	93	13	19	–	2	8	–	1	8½	0	8	–	–	2½
38	5	14	–	94	14	2	–	2	9	–	1	8¾	0	9	–	–	2¾
39	5	17	–	95	14	5	–	2	10	–	1	9	0	10	–	–	3
40	6	–	–	96	14	8	–	2	11	–	1	9½	0	11	–	–	3½
41	6	3	–	97	14	11	–	2	12	–	1	9¾	0	12	–	–	3¾
42	6	6	–	98	14	14	–	2	13	–	1	10	0	13	–	–	4
43	6	9	–	99	14	17	–	2	14	–	1	10½	0	14	–	–	4½
44	6	12	–	100	15	–	–	2	15	–	1	10¾	0	15	–	–	4¾
45	6	15	–	200	30	–	–	2	16	–	1	11	0	16	–	–	5
46	6	18	–	300	45	–	–	2	17	–	1	11¼	0	17	–	–	5¼
47	7	1	–	400	60	–	–	2	18	–	1	11¾	0	18	–	–	5¾
48	7	4	–	500	75	–	–	2	19	–	2	–	0	19	–	–	6
49	7	7	–	600	90	–	–	2	20	–	2	–¼	0	20	–	–	6¼
50	7	10	–	700	105	–	–	2	21	–	2	–¾	0	21	–	–	6¾
51	7	13	–	800	120	–	–	2	22	–	2	1	0	22	–	–	7
52	7	16	–	900	135	–	–	2	23	–	2	1¼	0	23	–	–	7¼
53	7	19	–	1000	150	–	–	2	24	–	2	1½	0	24	–	–	7½
54	8	2	–	2000	300	–	–	2	25	–	2	2	0	25	–	–	8
55	8	5	–	3000	450	–	–	2	26	–	2	2¼	0	26	–	–	8¼
56	8	8	–	4000	600	–	–	2	27	–	2	2½	0	27	–	–	8½

£3. 5s. per Ton.

3s. 3d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	~	3	3	57	9	5	3	1	~	~	~	9¾	3	~	~	2	5¼
2	~	6	6	58	9	8	6	1	1	~	~	10	3	1	~	2	5½
3	~	9	9	59	9	11	9	1	2	~	~	10¼	3	2	~	2	5¾
4	~	13	~	60	9	15	~	1	3	~	~	10¾	3	3	~	2	6¼
5	~	16	3	61	9	18	3	1	4	~	~	11	3	4	~	2	6½
6	~	19	6	62	10	1	6	1	5	~	~	11¼	3	5	~	2	6¾
7	1	2	9	63	10	4	9	1	6	~	~	11¾	3	6	~	2	7¼
8	1	6	~	64	10	8	~	1	7	~	1	~	3	7	~	2	7½
9	1	9	3	65	10	11	3	1	8	~	1	~½	3	8	~	2	8
10	1	12	6	66	10	14	6	1	9	~	1	~¾	3	9	~	2	8¼
11	1	15	9	67	10	17	9	1	10	~	1	1	3	10	~	2	8½
12	1	19	~	68	11	1	~	1	11	~	1	1½	3	11	~	2	9
13	2	2	3	69	11	4	3	1	12	~	1	1¾	3	12	~	2	9¼
14	2	5	6	70	11	7	6	1	13	~	1	2¼	3	13	~	2	9¾
15	2	8	9	71	11	10	9	1	14	~	1	2½	3	14	~	2	10
16	2	12	~	72	11	14	~	1	15	~	1	2¾	3	15	~	2	10¼
17	2	15	3	73	11	17	3	1	16	~	1	3¼	3	16	~	2	10¾
18	2	18	6	74	12	~	6	1	17	~	1	3½	3	17	~	2	11
19	3	1	9	75	12	3	9	1	18	~	1	4	3	18	~	2	11½
20	3	5	~	76	12	7	~	1	19	~	1	4¼	3	19	~	2	11¾
21	3	8	3	77	12	10	3	1	20	~	1	4½	3	20	~	3	~
22	3	11	6	78	12	13	6	1	21	~	1	5	3	21	~	3	~½
23	3	14	9	79	12	16	9	1	22	~	1	5¼	3	22	~	3	~¾
24	3	18	~	80	13	~	~	1	23	~	1	5¾	3	23	~	3	1¼
25	4	1	3	81	13	3	3	1	24	~	1	6	3	24	~	3	1½
26	4	4	6	82	13	6	6	1	25	~	1	6¼	3	25	~	3	1¾
27	4	7	9	83	13	9	9	1	26	~	1	6¾	3	26	~	3	2¼
28	4	11	~	84	13	13	~	1	27	~	1	7	3	27	~	3	2½
29	4	14	3	85	13	16	3	2	—	~	1	7½					
30	4	17	6	86	13	19	6	2	1	~	1	7¾	0	1	~	~	~¼
31	5	~	9	87	14	2	9	2	2	~	1	8	0	2	~	~	~½
32	5	4	~	88	14	6	~	2	3	~	1	8½	0	3	~	~	1
33	5	7	3	89	14	9	3	2	4	~	1	8¾	0	4	~	~	1¼
34	5	10	6	90	14	12	6	2	5	~	1	9	0	5	~	~	1½
35	5	13	9	91	14	15	9	2	6	~	1	9½	0	6	~	~	2
36	5	17	~	92	14	19	~	2	7	~	1	9¾	0	7	~	~	2¼
37	6	~	3	93	15	2	3	2	8	~	1	10¼	0	8	~	~	2¾
38	6	3	6	94	15	5	6	2	9	~	1	10½	0	9	~	~	3
39	6	6	9	95	15	8	9	2	10	~	1	10¾	0	10	~	~	3¼
40	6	10	~	96	15	12	~	2	11	~	1	11¼	0	11	~	~	3¾
41	6	13	3	97	15	15	3	2	12	~	1	11½	0	12	~	~	4
42	6	16	6	98	15	18	6	2	13	~	2	~	0	13	~	~	4½
43	6	19	9	99	16	1	9	2	14	~	2	~¼	0	14	~	~	4¾
44	7	3	~	100	16	5	~	2	15	~	2	~½	0	15	~	~	5
45	7	6	3	200	32	10	~	2	16	~	2	1	0	16	~	~	5½
46	7	9	6	300	48	15	~	2	17	~	2	1¼	0	17	~	~	5¾
47	7	12	9	400	65	~	~	2	18	~	2	1¾	0	18	~	~	6¼
48	7	16	~	500	81	5	~	2	19	~	2	2	0	19	~	~	6½
49	7	19	3	600	97	10	~	2	20	~	2	2¼	0	20	~	~	6¾
50	8	2	6	700	113	15	~	2	21	~	2	2¾	0	21	~	~	7¼
51	8	5	9	800	130	~	~	2	22	~	2	3	0	22	~	~	7½
52	8	9	~	900	146	5	~	2	23	~	2	3½	0	23	~	~	8
53	8	12	3	1000	162	10	~	2	24	~	2	3¾	0	24	~	~	8¼
54	8	15	6	2000	325	~	~	2	25	~	2	4	0	25	~	~	8½
55	8	18	9	3000	487	10	~	2	26	~	2	4½	0	26	~	~	9
56	9	2	~	4000	650	~	~	2	27	~	2	4¾	0	27	~	~	9¼

3s. 6d. per Cwt.

£3. 10s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	3	6	57	9	19	6	1	-	-	-	10½	3	-	-	2	7½
2	-	7	-	58	10	3	-	1	1	-	-	10¾	3	1	-	2	7¾
3	-	10	6	59	10	6	6	1	2	-	-	11¼	3	2	-	2	8¼
4	-	14	-	60	10	10	-	1	3	-	-	11½	3	3	-	2	8½
5	-	17	6	61	10	13	6	1	4	-	1	-	3	4	-	2	9
6	1	1	-	62	10	17	-	1	5	-	1	-¼	3	5	-	2	9¼
7	1	4	6	63	11	-	6	1	6	-	1	-¾	3	6	-	2	9¾
8	1	8	-	64	11	4	-	1	7	-	1	1	3	7	-	2	10
9	1	11	6	65	11	7	6	1	8	-	1	1½	3	8	-	2	10½
10	1	15	-	66	11	11	-	1	9	-	1	1¾	3	9	-	2	10¾
11	1	18	6	67	11	14	6	1	10	-	1	2¼	3	10	-	2	11¼
12	2	2	-	68	11	18	-	1	11	-	1	2½	3	11	-	2	11½
13	2	5	6	69	12	1	6	1	12	-	1	3	3	12	-	3	-
14	2	9	-	70	12	5	-	1	13	-	1	3¼	3	13	-	3	-¼
15	2	12	6	71	12	8	6	1	14	-	1	3¾	3	14	-	3	-¾
16	2	16	-	72	12	12	-	1	15	-	1	4	3	15	-	3	1
17	2	19	6	73	12	15	6	1	16	-	1	4½	3	16	-	3	1½
18	3	3	-	74	12	19	-	1	17	-	1	4¾	3	17	-	3	1¾
19	3	6	6	75	13	2	6	1	18	-	1	5¼	3	18	-	3	2¼
20	3	10	-	76	13	6	-	1	19	-	1	5½	3	19	-	3	2½
21	3	13	6	77	13	9	6	1	20	-	1	6	3	20	-	3	3
22	3	17	-	78	13	13	-	1	21	-	1	6¼	3	21	-	3	3¼
23	4	-	6	79	13	16	6	1	22	-	1	6¾	3	22	-	3	3¾
24	4	4	-	80	14	-	-	1	23	-	1	7	3	23	-	3	4
25	4	7	6	81	14	3	6	1	24	-	1	7½	3	24	-	3	4½
26	4	11	-	82	14	7	-	1	25	-	1	7¾	3	25.	-	3	4¾
27	4	14	6	83	14	10	6	1	26	-	1	8¼	3	26	-	3	5¼
28	4	18	-	84	14	14	-	1	27	-	1	8½	3	27	-	3	5¾
29	5	1	6	85	14	17	6	2	—	-	1	9					
30	5	5	-	86	15	1	-	2	1	-	1	9¼	0	1	-	-	-¼
31	5	8	6	87	15	4	6	2	2	-	1	9¾	0	2	-	-	-¾
32	5	12	-	88	15	8	-	2	3	-	1	10	0	3	-	-	1
33	5	15	6	89	15	11	6	2	4	-	1	10½	0	4	-	-	1½
34	5	19	-	90	15	15	-	2	5	-	1	10¾	0	5	-	-	1¾
35	6	2	6	91	15	18	6	2	6	-	1	11¼	0	6	-	-	2¼
36	6	6	-	92	16	2	-	2	7	-	1	11½	0	7	-	-	2½
37	6	9	6	93	16	5	6	2	8	-	2	-	0	8	-	-	3
38	6	13	-	94	16	9	-	2	9	-	2	-¼	0	9	-	-	3¼
39	6	16	6	95	16	12	6	2	10	-	2	-¾	0	10	-	-	3¾
40	7	-	-	96	16	16	-	2	11	-	2	1	0	11	-	-	4
41	7	3	6	97	16	19	6	2	12	-	2	1½	0	12	-	-	4½
42	7	7	-	98	17	3	-	2	13	-	2	1¾	0	13	-	-	4¾
43	7	10	6	99	17	6	6	2	14	-	2	2¼	0	14	-	-	5¼
44	7	14	-	100	17	10	-	2	15	-	2	2½	0	15	-	-	5½
45	7	17	6	200	35	-	-	2	16	-	2	3	0	16	-	-	6
46	8	1	-	300	52	10	-	2	17	-	2	3¼	0	17	-	-	6¼
47	8	4	6	400	70	-	-	2	18	-	2	3¾	0	18	-	-	6¾
48	8	8	-	500	87	10	-	2	19	-	2	4	0	19	-	-	7
49	8	11	6	600	105	-	-	2	20	-	2	4½	0	20	-	-	7½
50	8	15	-	700	122	10	-	2	21	-	2	4¾	0	21	-	-	7¾
51	8	18	6	800	140	-	-	2	22	-	2	5¼	0	22	-	-	8¼
52	9	2	-	900	157	10	-	2	23	-	2	5½	0	23	-	-	8½
53	9	5	6	1000	175	-	-	2	24	-	2	6	0	24	-	-	9
54	9	9	-	2000	350	-	-	2	25	-	2	6¼	0	25	-	-	9¼
55	9	12	6	3000	525	-	-	2	26	-	2	6¾	0	26	-	-	9¾
56	9	16	-	4000	700	-	-	2	27	-	2	7	0	27	-	-	10

£3. 15s. per Ton.

3s. 9d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	3	9	57	10	13	9	1	–	–	–	11¼	3	–	–	2	9¾
2	–	7	6	58	10	17	6	1	1	–	–	11½	3	1	–	2	10
3	–	11	3	59	11	1	3	1	2	–	1	–	3	2	–	2	10½
4	–	15	–	60	11	5	–	1	3	–	1	–¼	3	3	–	2	10¾
5	–	18	9	61	11	8	9	1	4	–	1	–¾	3	4	–	2	11¼
6	1	2	6	62	11	12	6	1	5	–	1	1¼	3	5	–	2	11¾
7	1	6	3	63	11	16	3	1	6	–	1	1¾	3	6	–	3	–
8	1	10	–	64	12	–	–	1	7	–	1	2	3	7	–	3	–½
9	1	13	9	65	12	3	9	1	8	–	1	2¼	3	8	–	3	–¾
10	1	17	6	66	12	7	6	1	9	–	1	2¾	3	9	–	3	1¼
11	2	1	3	67	12	11	3	1	10	–	1	3¼	3	10	–	3	1¾
12	2	5	–	68	12	15	–	1	11	–	1	3½	3	11	–	3	2
13	2	8	9	69	12	18	9	1	12	–	1	4	3	12	–	3	2½
14	2	12	6	70	13	2	6	1	13	–	1	4¼	3	13	–	3	2¾
15	2	16	3	71	13	6	3	1	14	–	1	4¾	3	14	–	3	3¼
16	3	–	–	72	13	10	–	1	15	–	1	5¼	3	15	–	3	3¾
17	3	3	9	73	13	13	9	1	16	–	1	5½	3	16	–	3	4
18	3	7	6	74	13	17	6	1	17	–	1	6	3	17	–	3	4½
19	3	11	3	75	14	1	3	1	18	–	1	6¼	3	18	–	3	4¾
20	3	15	–	76	14	5	–	1	19	–	1	6¾	3	19	–	3	5¼
21	3	18	9	77	14	8	9	1	20	–	1	7¼	3	20	–	3	5¾
22	4	2	6	78	14	12	6	1	21	–	1	7½	3	21	–	3	6
23	4	6	3	79	14	16	3	1	22	–	1	8	3	22	–	3	6½
24	4	10	–	80	15	–	–	1	23	–	1	8¼	3	23	–	3	6¾
25	4	13	9	81	15	3	9	1	24	–	1	8¾	3	24	–	3	7¼
26	4	17	6	82	15	7	6	1	25	–	1	9¼	3	25	–	3	7¾
27	5	1	3	83	15	11	3	1	26	–	1	9½	3	26	–	3	8
28	5	5	–	84	15	15	–	1	27	–	1	10	3	27	–	3	8½
29	5	8	9	85	15	18	9	2	—	–	1	10½					
30	5	12	6	86	16	2	6	2	1	–	1	10¾	0	1	–	–	–¼
31	5	16	3	87	16	6	3	2	2	–	1	11¼	0	2	–	–	–¾
32	6	–	–	88	16	10	–	2	3	–	1	11½	0	3	–	–	1
33	6	3	9	89	16	13	9	2	4	–	2	–	0	4	–	–	1½
34	6	7	6	90	16	17	6	2	5	–	2	–½	0	5	–	–	2
35	6	11	3	91	17	1	3	2	6	–	2	–¾	0	6	–	–	2¼
36	6	15	–	92	17	5	–	2	7	–	2	1¼	0	7	–	–	2¾
37	6	18	9	93	17	8	9	2	8	–	2	1½	0	8	–	–	3
38	7	2	6	94	17	12	6	2	9	–	2	2	0	9	–	–	3½
39	7	6	3	95	17	16	3	2	10	–	2	2½	0	10	–	–	4
40	7	10	–	96	18	–	–	2	11	–	2	2¾	0	11	–	–	4¼
41	7	13	9	97	18	3	9	2	12	–	2	3¼	0	12	–	–	4¾
42	7	17	6	98	18	7	6	2	13	–	2	3½	0	13	–	–	5
43	8	1	3	99	18	11	3	2	14	–	2	4	0	14	–	–	5½
44	8	5	–	100	18	15	–	2	15	–	2	4½	0	15	–	–	6
45	8	8	9	200	37	10	–	2	16	–	2	4¾	0	16	–	–	6¼
46	8	12	6	300	56	5	–	2	17	–	2	5¼	0	17	–	–	6¾
47	8	16	3	400	75	–	–	2	18	–	2	5½	0	18	–	–	7
48	9	–	–	500	93	15	–	2	19	–	2	6	0	19	–	–	7½
49	9	3	9	600	112	10	–	2	20	–	2	6½	0	20	–	–	8
50	9	7	6	700	131	5	–	2	21	–	2	6¾	0	21	–	–	8¼
51	9	11	3	800	150	–	–	2	22	–	2	7¼	0	22	–	–	8¾
52	9	15	–	900	168	15	–	2	23	–	2	7¾	0	23	–	–	9
53	9	18	9	1000	187	10	–	2	24	–	2	8	0	24	–	–	9½
54	10	2	6	2000	375	–	–	2	25	–	2	8½	0	25	–	–	10
55	10	6	3	3000	562	10	–	2	26	–	2	8¾	0	26	–	–	10¼
56	10	10	–	4000	750	–	–	2	27	–	2	9¼	0	27	–	–	10¾

4s. per Cwt.

£4. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	4	-	57	11	8	-	1	-	-	1	-	3	-	-	3	-
2	-	8	-	58	11	12	-	1	1	-	1	-¼	3	1	-	3	-¼
3	-	12	-	59	11	16	-	1	2	-	1	-¾	3	2	-	3	-¾
4	-	16	-	60	12	-	-	1	3	-	1	1¼	3	3	-	3	1¼
5	1	-	-	61	12	4	-	1	4	-	1	1½	3	4	-	3	1½
6	1	4	-	62	12	8	-	1	5	-	1	2	3	5	-	3	2
7	1	8	-	63	12	12	-	1	6	-	1	2½	3	6	-	3	2½
8	1	12	-	64	12	16	-	1	7	-	1	3	3	7	-	3	3
9	1	16	-	65	13	-	-	1	8	-	1	3¼	3	8	-	3	3¼
10	2	-	-	66	13	4	-	1	9	-	1	3¾	3	9	-	3	3¾
11	2	4	-	67	13	8	-	1	10	-	1	4¼	3	10	-	3	4¼
12	2	8	-	68	13	12	-	1	11	-	1	4½	3	11	-	3	4½
13	2	12	-	69	13	16	-	1	12	-	1	5	3	12	-	3	5
14	2	16	-	70	14	-	-	1	13	-	1	5½	3	13	-	3	5½
15	3	-	-	71	14	4	-	1	14	-	1	6	3	14	-	3	6
16	3	4	-	72	14	8	-	1	15	-	1	6¼	3	15	-	3	6¼
17	3	8	-	73	14	12	-	1	16	-	1	6¾	3	16	-	3	6¾
18	3	12	-	74	14	16	-	1	17	-	1	7¼	3	17	-	3	7¼
19	3	16	-	75	15	-	-	1	18	-	1	7½	3	18	-	3	7½
20	4	-	-	76	15	4	-	1	19	-	1	8	3	19	-	3	8
21	4	4	-	77	15	8	-	1	20	-	1	8½	3	20	-	3	8½
22	4	8	-	78	15	12	-	1	21	-	1	9	3	21	-	3	9
23	4	12	-	79	15	16	-	1	22	-	1	9¼	3	22	-	3	9¼
24	4	16	-	80	16	-	-	1	23	-	1	9¾	3	23	-	3	9¾
25	5	-	-	81	16	4	-	1	24	-	1	10¼	3	24	-	3	10¼
26	5	4	-	82	16	8	-	1	25	-	1	10½	3	25	-	3	10½
27	5	8	-	83	16	12	-	1	26	-	1	11	3	26	-	3	11
28	5	12	-	84	16	16	-	1	27	-	1	11½	3	27	-	3	11½
29	5	16	-	85	17	-	-	2	—	-	2	-					
30	6	-	-	86	17	4	-	2	1	-	2	-¼	0	1	-	-	-¼
31	6	4	-	87	17	8	-	2	2	-	2	-¾	0	2	-	-	-¾
32	6	8	-	88	17	12	-	2	3	-	2	1¼	0	3	-	-	1¼
33	6	12	-	89	17	16	-	2	4	-	2	1½	0	4	-	-	1½
34	6	16	-	90	18	-	-	2	5	-	2	2	0	5	-	-	2
35	7	-	-	91	18	4	-	2	6	-	2	2½	0	6	-	-	2½
36	7	4	-	92	18	8	-	2	7	-	2	3	0	7	-	-	3
37	7	8	-	93	18	12	-	2	8	-	2	3¼	0	8	-	-	3¼
38	7	12	-	94	18	16	-	2	9	-	2	3¾	0	9	-	-	3¾
39	7	16	-	95	19	-	-	2	10	-	2	4¼	0	10	-	-	4¼
40	8	-	-	96	19	4	-	2	11	-	2	4½	0	11	-	-	4½
41	8	4	-	97	19	8	-	2	12	-	2	5	0	12	-	-	5
42	8	8	-	98	19	12	-	2	13	-	2	5½	0	13	-	-	5½
43	8	12	-	99	19	16	-	2	14	-	2	6	0	14	-	-	6
44	8	16	-	100	20	-	-	2	15	-	2	6¼	0	15	-	-	6¼
45	9	-	-	200	40	-	-	2	16	-	2	6¾	0	16	-	-	6¾
46	9	4	-	300	60	-	-	2	17	-	2	7¼	0	17	-	-	7¼
47	9	8	-	400	80	-	-	2	18	-	2	7½	0	18	-	-	7½
48	9	12	-	500	100	-	-	2	19	-	2	8	0	19	-	-	8
49	9	16	-	600	120	-	-	2	20	-	2	8½	0	20	-	-	8½
50	10	-	-	700	140	-	-	2	21	-	2	9	0	21	-	-	9
51	10	4	-	800	160	-	-	2	22	-	2	9¼	0	22	-	-	9¼
52	10	8	-	900	180	-	-	2	23	-	2	9¾	0	23	-	-	9¾
53	10	12	-	1000	200	-	-	2	24	-	2	10¼	0	24	-	-	10¼
54	10	16	-	2000	400	-	-	2	25	-	2	10½	0	25	-	-	10½
55	11	-	-	3000	600	-	-	2	26	-	2	11	0	26	-	-	11
56	11	4	-	4000	800	-	-	2	27	-	2	11½	0	27	-	-	11½

£4. 5s. per Ton. **4s. 3d. *per Cwt.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb	£.	s.	d.
1	–	4	3	57	12	2	3	1	–	–	1	–¾	3	–	–	3	2¼
2	–	8	6	58	12	6	6	1	1	–	1	1	3	1	–	3	2½
3	–	12	9	59	12	10	9	1	2	–	1	1½	3	2	–	3	3
4	–	17	–	60	12	15	–	1	3	–	1	2	3	3	–	3	3½
5	1	1	3	61	12	19	3	1	4	–	1	2½	3	4	–	3	4
6	1	5	6	62	13	3	6	1	5	–	1	3	3	5	–	3	4½
7	1	9	9	63	13	7	9	1	6	–	1	3¼	3	6	–	3	4¾
8	1	14	–	64	13	12	–	1	7	–	1	3¾	3	7	–	3	5¼
9	1	18	3	65	13	16	3	1	8	–	1	4¼	3	8	–	3	5¾
10	2	2	6	66	14	–	6	1	9	–	1	4¾	3	9	–	3	6¼
11	2	6	9	67	14	4	9	1	10	–	1	5¼	3	10	–	3	6¾
12	2	11	–	68	14	9	–	1	11	–	1	5¾	3	11	–	3	7¼
13	2	15	3	69	14	13	3	1	12	–	1	6	3	12	–	3	7½
14	2	19	6	70	14	17	6	1	13	–	1	6½	3	13	–	3	8
15	3	3	9	71	15	1	9	1	14	–	1	7	3	14	–	3	8½
16	3	8	–	72	15	6	–	1	15	–	1	7½	3	15	–	3	9
17	3	12	3	73	15	10	3	1	16	–	1	8	3	16	–	3	9½
18	3	16	6	74	15	14	6	1	17	–	1	8¼	3	17	–	3	9¾
19	4	–	9	75	15	18	9	1	18	–	1	8¾	3	18	–	3	10¼
20	4	5	–	76	16	3	–	1	19	–	1	9¼	3	19	–	3	10¾
21	4	9	3	77	16	7	3	1	20	–	1	9¾	3	20	–	3	11¼
22	4	13	6	78	16	11	6	1	21	–	1	10¼	3	21	–	3	11¾
23	4	17	9	79	16	15	9	1	22	–	1	10¾	3	22	–	4	–¼
24	5	2	–	80	17	–	–	1	23	–	1	11	3	23	–	4	–½
25	5	6	3	81	17	4	3	1	24	–	1	11½	3	24	–	4	1
26	5	10	6	82	17	8	6	1	25	–	2	–	3	25	–	4	1½
27	5	14	9	83	17	12	9	1	26	–	2	–½	3	26	–	4	2
28	5	19	–	84	17	17	–	1	27	–	2	1	3	27	–	4	2½
29	6	3	3	85	18	1	3	2	—	–	2	1½					
30	6	7	6	86	18	5	6	2	1	–	2	1¾	0	1	–	–	–¼
31	6	11	9	87	18	9	9	2	2	–	2	2¼	0	2	–	–	–¾
32	6	16	–	88	18	14	–	2	3	–	2	2¾	0	3	–	–	1¼
33	7	–	3	89	18	18	3	2	4	–	2	3¼	0	4	–	–	1¾
34	7	4	6	90	19	2	6	2	5	–	2	3¾	0	5	–	–	2¼
35	7	8	9	91	19	6	9	2	6	–	2	4	0	6	–	–	2½
36	7	13	–	92	19	11	–	2	7	–	2	4½	0	7	–	–	3
37	7	17	3	93	19	15	3	2	8	–	2	5	0	8	–	–	3½
38	8	1	6	94	19	19	6	2	9	–	2	5½	0	9	–	–	4
39	8	5	9	95	20	3	9	2	10	–	2	6	0	10	–	–	4½
40	8	10	–	96	20	8	–	2	11	–	2	6½	0	11	–	–	5
41	8	14	3	97	20	12	3	2	12	–	2	6¾	0	12	–	–	5¼
42	8	18	6	98	20	16	6	2	13	–	2	7¼	0	13	–	–	5¾
43	9	2	9	99	21	–	9	2	14	–	2	7¾	0	14	–	–	6¼
44	9	7	–	100	21	5	–	2	15	–	2	8¼	0	15	–	–	6¾
45	9	11	3	200	42	10	–	2	16	–	2	8¾	0	16	–	–	7¼
46	9	15	6	300	63	15	–	2	17	–	2	9	0	17	–	–	7½
47	9	19	9	400	85	–	–	2	18	–	2	9½	0	18	–	–	8
48	10	4	–	500	106	5	–	2	19	–	2	10	0	19	–	–	8½
49	10	8	3	600	127	10	–	2	20	–	2	10½	0	20	–	–	9
50	10	12	6	700	148	15	–	2	21	–	2	11	0	21	–	–	9½
51	10	16	9	800	170	–	–	2	22	–	2	11½	0	22	–	–	10
52	11	1	–	900	191	5	–	2	23	–	2	11¾	0	23	–	–	10¼
53	11	5	3	1000	212	10	–	2	24	–	3	–¼	0	24	–	–	10¾
54	11	9	6	2000	425	–	–	2	25	–	3	–¾	0	25	–	–	11¼
55	11	13	9	3000	637	10	–	2	26	–	3	1¼	0	26	–	–	11¾
56	11	18	–	4000	850	–	–	2	27	–	3	1¾	0	27	–	1	–¼

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	4	6	57	12	16	6	1	–	–	1	1½	3	–	–	3	4½
2	–	9	–	58	13	1	–	1	1	–	1	1¾	3	1	–	3	4¾
3	–	13	6	59	13	5	6	1	2	–	1	2¼	3	2	–	3	5¼
4	–	18	–	60	13	10	–	1	3	–	1	2¾	3	3	–	3	5¾
5	1	2	6	61	13	14	6	1	4	–	1	3¼	3	4	–	3	6¼
6	1	7	–	62	13	19	–	1	5	–	1	3¾	3	5	–	3	6¾
7	1	11	6	63	14	3	6	1	6	–	1	4¼	3	6	–	3	7¼
8	1	16	–	64	14	8	–	1	7	–	1	4¾	3	7	–	3	7¾
9	2	–	6	65	14	12	6	1	8	–	1	5¼	3	8	–	3	8¼
10	2	5	–	66	14	17	–	1	9	–	1	5¾	3	9	–	3	8¾
11	2	9	6	67	15	1	6	1	10	–	1	6¼	3	10	–	3	9¼
12	2	14	–	68	15	6	–	1	11	–	1	6¾	3	11	–	3	9¾
13	2	18	6	69	15	10	6	1	12	–	1	7¼	3	12	–	3	10¼
14	3	3	–	70	15	15	–	1	13	–	1	7¾	3	13	–	3	10¾
15	3	7	6	71	15	19	6	1	14	–	1	8¼	3	14	–	3	11¼
16	3	12	–	72	16	4	–	1	15	–	1	8½	3	15	–	3	11½
17	3	16	6	73	16	8	6	1	16	–	1	9	3	16	–	4	–
18	4	1	–	74	16	13	–	1	17	–	1	9½	3	17	–	4	–½
19	4	5	6	75	16	17	6	1	18	–	1	10	3	18	–	4	1
20	4	10	–	76	17	2	–	1	19	–	1	10½	3	19	–	4	1½
21	4	14	6	77	17	6	6	1	20	–	1	11	3	20	–	4	2
22	4	19	–	78	17	11	–	1	21	–	1	11½	3	21	–	4	2½
23	5	3	6	79	17	15	6	1	22	–	2	–	3	22	–	4	3
24	5	8	–	80	18	–	–	1	23	–	2	–½	3	23	–	4	3½
25	5	12	6	81	18	4	6	1	24	–	2	1	3	24	–	4	4
26	5	17	–	82	18	9	–	1	25	–	2	1½	3	25	–	4	4½
27	6	1	6	83	18	13	6	1	26	–	2	2	3	26	–	4	5
28	6	6	–	84	18	18	–	1	27	–	2	2½	3	27	–	4	5½
29	6	10	6	85	19	2	6	2	—	–	2	3					
30	6	15	–	86	19	7	–	2	1	–	2	3¼	0	1	–	–	–¼
31	6	19	6	87	19	11	6	2	2	–	2	3¾	0	2	–	–	–¾
32	7	4	–	88	19	16	–	2	3	–	2	4¼	0	3	–	–	1¼
33	7	8	6	89	20	–	6	2	4	–	2	4¾	0	4	–	–	1¾
34	7	13	–	90	20	5	–	2	5	–	2	5¼	0	5	–	–	2¼
35	7	17	6	91	20	9	6	2	6	–	2	5¾	0	6	–	–	2¾
36	8	2	–	92	20	14	–	2	7	–	2	6¼	0	7	–	–	3¼
37	8	6	6	93	20	18	6	2	8	–	2	6¾	0	8	–	–	3¾
38	8	11	–	94	21	3	–	2	9	–	2	7¼	0	9	–	–	4¼
39	8	15	6	95	21	7	6	2	10	–	2	7¾	0	10	–	–	4¾
40	9	–	–	96	21	12	–	2	11	–	2	8¼	0	11	–	–	5¼
41	9	4	6	97	21	16	6	2	12	–	2	8¾	0	12	–	–	5¾
42	9	9	–	98	22	1	–	2	13	–	2	9¼	0	13	–	–	6¼
43	9	13	6	99	22	5	6	2	14	–	2	9¾	0	14	–	–	6¾
44	9	18	–	100	22	10	–	2	15	–	2	10	0	15	–	–	7
45	10	2	6	200	45	–	–	2	16	–	2	10½	0	16	–	–	7½
46	10	7	–	300	67	10	–	2	17	–	2	11	0	17	–	–	8
47	10	11	6	400	90	–	–	2	18	–	2	11½	0	18	–	–	8½
48	10	16	–	500	112	10	–	2	19	–	3	–	0	19	–	–	9
49	11	–	6	600	135	–	–	2	20	–	3	–½	0	20	–	–	9½
50	11	5	–	700	157	10	–	2	21	–	3	1	0	21	–	–	10
51	11	9	6	800	180	–	–	2	22	–	3	1½	0	22	–	–	10½
52	11	14	–	900	202	10	–	2	23	–	3	2	0	23	–	–	11
53	11	18	6	1000	225	–	–	2	24	–	3	2½	0	24	–	–	11½
54	12	3	–	2000	450	–	–	2	25	–	3	3	0	25	–	1	–
55	12	7	6	3000	675	–	–	2	26	–	3	3½	0	26	–	1	–½
56	12	12	–	4000	900	–	–	2	27	–	3	4	0	27	–	1	1

£4. 13s. 4d. per Ton. ½ per lb. 4s. 8d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	4	8	57	13	6	–	1	–	–	1	2	3	–	–	3	6
2	–	9	4	58	13	10	8	1	1	–	1	2½	3	1	–	3	6½
3	–	14	–	59	13	15	4	1	2	–	1	3	3	2	–	3	7
4	–	18	8	60	14	–	–	1	3	–	1	3½	3	3	–	3	7½
5	1	3	4	61	14	4	8	1	4	–	1	4	3	4	–	3	8
6	1	8	–	62	14	9	4	1	5	–	1	4½	3	5	–	3	8½
7	1	12	8	63	14	14	–	1	6	–	1	5	3	6	–	3	9
8	1	17	4	64	14	18	8	1	7	–	1	5½	3	7	–	3	9½
9	2	2	–	65	15	3	4	1	8	–	1	6	3	8	–	3	10
10	2	6	8	66	15	8	–	1	9	–	1	6½	3	9	–	3	10½
11	2	11	4	67	15	12	8	1	10	–	1	7	3	10	–	3	11
12	2	16	–	68	15	17	4	1	11	–	1	7½	3	11	–	3	11½
13	3	–	8	69	16	2	–	1	12	–	1	8	3	12	–	4	–
14	3	5	4	70	16	6	8	1	13	–	1	8½	3	13	–	4	–½
15	3	10	–	71	16	11	4	1	14	–	1	9	3	14	–	4	1
16	3	14	8	72	16	16	–	1	15	–	1	9½	3	15	–	4	1½
17	3	19	4	73	17	–	8	1	16	–	1	10	3	16	–	4	2
18	4	4	–	74	17	5	4	1	17	–	1	10½	3	17	–	4	2½
19	4	8	8	75	17	10	–	1	18	–	1	11	3	18	–	4	3
20	4	13	4	76	17	14	8	1	19	–	1	11½	3	19	–	4	3½
21	4	18	–	77	17	19	4	1	20	–	2	–	3	20	–	4	4
22	5	2	8	78	18	4	–	1	21	–	2	–½	3	21	–	4	4½
23	5	7	4	79	18	8	8	1	22	–	2	1	3	22	–	4	5
24	5	12	–	80	18	13	4	1	23	–	2	1½	3	23	–	4	5½
25	5	16	8	81	18	18	–	1	24	–	2	2	3	24	–	4	6
26	6	1	4	82	19	2	8	1	25	–	2	2½	3	25	–	4	6½
27	6	6	–	83	19	7	4	1	26	–	2	3	3	26	–	4	7
28	6	10	8	84	19	12	–	1	27	–	2	3½	3	27	–	4	7½
29	6	15	4	85	19	16	8	2	—	–	2	4					
30	7	–	–	86	20	1	4	2	1	–	2	4½	0	1	–	–	–½
31	7	4	8	87	20	6	–	2	2	–	2	5	0	2	–	–	1
32	7	9	4	88	20	10	8	2	3	–	2	5½	0	3	–	–	1½
33	7	14	–	89	20	15	4	2	4	–	2	6	0	4	–	–	2
34	7	18	8	90	21	–	–	2	5	–	2	6½	0	5	–	–	2½
35	8	3	4	91	21	4	8	2	6	–	2	7	0	6	–	–	3
36	8	8	–	92	21	9	4	2	7	–	2	7½	0	7	–	–	3½
37	8	12	8	93	21	14	–	2	8	–	2	8	0	8	–	–	4
38	8	17	4	94	21	18	8	2	9	–	2	8½	0	9	–	–	4½
39	9	2	–	95	22	3	4	2	10	–	2	9	0	10	–	–	5
40	9	6	8	96	22	8	–	2	11	–	2	9½	0	11	–	–	5½
41	9	11	4	97	22	12	8	2	12	–	2	10	0	12	–	–	6
42	9	16	–	98	22	17	4	2	13	–	2	10½	0	13	–	–	6½
43	10	–	8	99	23	2	–	2	14	–	2	11	0	14	–	–	7
44	10	5	4	100	23	6	8	2	15	–	2	11½	0	15	–	–	7½
45	10	10	–	200	46	13	4	2	16	–	3	–	0	16	–	–	8
46	10	14	8	300	70	–	–	2	17	–	3	–½	0	17	–	–	8½
47	10	19	4	400	93	6	8	2	18	–	3	1	0	18	–	–	9
48	11	4	–	500	116	13	4	2	19	–	3	1½	0	19	–	–	9½
49	11	8	8	600	140	–	–	2	20	–	3	2	0	20	–	–	10
50	11	13	4	700	163	6	8	2	21	–	3	2½	0	21	–	–	10½
51	11	18	–	800	186	13	4	2	22	–	3	3	0	22	–	–	11
52	12	2	8	900	210	–	–	2	23	–	3	3½	0	23	–	–	11½
53	12	7	4	1000	233	6	8	2	24	–	3	4	0	24	–	1	–
54	12	12	–	2000	466	13	4	2	25	–	3	4½	0	25	–	1	–½
55	12	16	8	3000	700	–	–	2	26	–	3	5	0	26	–	1	1
56	13	1	4	4000	933	6	8	2	27	–	3	5½	0	27	–	1	1½

4s. 9d. per Cwt.

£4. 15s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	4	9	57	13	10	9	1	–	–	1	2¼	3	–	–	3	6¾
2	–	9	6	58	13	15	6	1	1	–	1	2¾	3	1	–	3	7¼
3	–	14	3	59	14	–	3	1	2	–	1	3¼	3	2	–	3	7¾
4	–	19	–	60	14	5	–	1	3	–	1	3¾	3	3	–	3	8¼
5	1	3	9	61	14	9	9	1	4	–	1	4¼	3	4	–	3	8¾
6	1	8	6	62	14	14	6	1	5	–	1	4¾	3	5	–	3	9¼
7	1	13	3	63	14	19	3	1	6	–	1	5¼	3	6	–	3	9¾
8	1	18	–	64	15	4	–	1	7	–	1	5¾	3	7	–	3	10¼
9	2	2	9	65	15	8	9	1	8	–	1	6¼	3	8	–	3	10¾
10	2	7	6	66	15	13	6	1	9	–	1	6¾	3	9	–	3	11¼
11	2	12	3	67	15	18	3	1	10	–	1	7¼	3	10	–	3	11¾
12	2	17	–	68	16	3	–	1	11	–	1	7¾	3	11	–	4	–¼
13	3	1	9	69	16	7	9	1	12	–	1	8¼	3	12	–	4	–¾
14	3	6	6	70	16	12	6	1	13	–	1	8¾	3	13	–	4	1¼
15	3	11	3	71	16	17	3	1	14	–	1	9¼	3	14	–	4	1¾
16	3	16	–	72	17	2	–	1	15	–	1	9¾	3	15	–	4	2¼
17	4	–	9	73	17	6	9	1	16	–	1	10¼	3	16	–	4	2¾
18	4	5	6	74	17	11	6	1	17	–	1	10¾	3	17	–	4	3¼
19	4	10	3	75	17	16	3	1	18	–	1	11¼	3	18	–	4	3¾
20	4	15	–	76	18	1	–	1	19	–	1	11¾	3	19	–	4	4¼
21	4	19	9	77	18	5	9	1	20	–	2	–¼	3	20	–	4	4¾
22	5	4	6	78	18	10	6	1	21	–	2	–¾	3	21	–	4	5¼
23	5	9	3	79	18	15	3	1	22	–	2	1¼	3	22	–	4	5¾
24	5	14	–	80	19	–	–	1	23	–	2	1¾	3	23	–	4	6¼
25	5	18	9	81	19	4	9	1	24	–	2	2¼	3	24	–	4	6¾
26	6	3	6	82	19	9	6	1	25	–	2	2¾	3	25	–	4	7¼
27	6	8	3	83	19	14	3	1	26	–	2	3¼	3	26	–	4	7¾
28	6	13	–	84	19	19	–	1	27	–	2	3¾	3	27	–	4	8¼
29	6	17	9	85	20	3	9	2	—	–	2	4½					
30	7	2	6	86	20	8	6	2	1	–	2	5	0	1	–	–	–½
31	7	7	3	87	20	13	3	2	2	–	2	5½	0	2	–	–	1
32	7	12	–	88	20	18	–	2	3	–	2	6	0	3	–	–	1½
33	7	16	9	89	21	2	9	2	4	–	2	6½	0	4	–	–	2
34	8	1	6	90	21	7	6	2	5	–	2	7	0	5	–	–	2½
35	8	6	3	91	21	12	3	2	6	–	2	7½	0	6	–	–	3
36	8	11	–	92	21	17	–	2	7	–	2	8	0	7	–	–	3½
37	8	15	9	93	22	1	9	2	8	–	2	8½	0	8	–	–	4
38	9	–	6	94	22	6	6	2	9	–	2	9	0	9	–	–	4½
39	9	5	3	95	22	11	3	2	10	–	2	9½	0	10	–	–	5
40	9	10	–	96	22	16	–	2	11	–	2	10	0	11	–	–	5½
41	9	14	9	97	23	–	9	2	12	–	2	10½	0	12	–	–	6
42	9	19	6	98	23	5	6	2	13	–	2	11	0	13	–	–	6½
43	10	4	3	99	23	10	3	2	14	–	2	11½	0	14	–	–	7
44	10	9	–	100	23	15	–	2	15	–	3	–	0	15	–	–	7½
45	10	13	9	200	47	10	–	2	16	–	3	–½	0	16	–	–	8
46	10	18	6	300	71	5	–	2	17	–	3	1	0	17	–	–	8½
47	11	3	3	400	95	–	–	2	18	–	3	1½	0	18	–	–	9
48	11	8	–	500	118	15	–	2	19	–	3	2	0	19	–	–	9½
49	11	12	9	600	142	10	–	2	20	–	3	2½	0	20	–	–	10
50	11	17	6	700	166	5	–	2	21	–	3	3	0	21	–	–	10½
51	12	2	3	800	190	–	–	2	22	–	3	3½	0	22	–	–	11
52	12	7	–	900	213	15	–	2	23	–	3	4	0	23	–	–	11½
53	12	11	9	1000	237	10	–	2	24	–	3	4½	0	24	–	1	–
54	12	16	6	2000	475	–	–	2	25	–	3	5	0	25	–	1	–½
55	13	1	3	3000	712	10	–	2	26	–	3	5½	0	26	–	1	1
56	13	6	–	4000	950	–	–	2	27	–	3	6	0	27	–	1	1½

£5. per Ton.

5*s*. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	5	–	57	14	5	–	1	–	–	1	3	3	–	–	3	9
2	–	10	–	58	14	10	–	1	1	–	1	3½	3	1	–	3	9½
3	–	15	–	59	14	15	–	1	2	–	1	4	3	2	–	3	10
4	1	–	–	60	15	–	–	1	3	–	1	4½	3	3	–	3	10½
5	1	5	–	61	15	5	–	1	4	–	1	5	3	4	–	3	11
6	1	10	–	62	15	10	–	1	5	–	1	5½	3	5	–	3	11½
7	1	15	–	63	15	15	–	1	6	–	1	6	3	6	–	4	–
8	2	–	–	64	16	–	–	1	7	–	1	6¾	3	7	–	4	–¾
9	2	5	–	65	16	5	–	1	8	–	1	7¼	3	8	–	4	1¼
10	2	10	–	66	16	10	–	1	9	–	1	7¾	3	9	–	4	1¾
11	2	15	–	67	16	15	–	1	10	–	1	8¼	3	10	–	4	2¼
12	3	–	–	68	17	–	–	1	11	–	1	8¾	3	11	–	4	2¾
13	3	5	–	69	17	5	–	1	12	–	1	9¼	3	12	–	4	3¼
14	3	10	–	70	17	10	–	1	13	–	1	9¾	3	13	–	4	3¾
15	3	15	–	71	17	15	–	1	14	–	1	10½	3	14	–	4	4½
16	4	–	–	72	18	–	–	1	15	–	1	11	3	15	–	4	5
17	4	5	–	73	18	5	–	1	16	–	1	11½	3	16	–	4	5½
18	4	10	–	74	18	10	–	1	17	–	2	–	3	17	–	4	6
19	4	15	–	75	18	15	–	1	18	–	2	–½	3	18	–	4	6½
20	5	–	–	76	19	–	–	1	19	–	2	1	3	19	–	4	7
21	5	5	–	77	19	5	–	1	20	–	2	1½	3	20	–	4	7½
22	5	10	–	78	19	10	–	1	21	–	2	2¼	3	21	–	4	8¼
23	5	15	–	79	19	15	–	1	22	–	2	2¾	3	22	–	4	8¾
24	6	–	–	80	20	–	–	1	23	–	2	3¼	3	23	–	4	9¼
25	6	5	–	81	20	5	–	1	24	–	2	3¾	3	24	–	4	9¾
26	6	10	–	82	20	10	–	1	25	–	2	4¼	3	25	–	4	10¼
27	6	15	–	83	20	15	–	1	26	–	2	4¾	3	26	–	4	10¾
28	7	–	–	84	21	–	–	1	27	–	2	5¼	3	27	–	4	11¼
29	7	5	–	85	21	5	–	2	—	–	2	6					
30	7	10	–	86	21	10	–	2	1	–	2	6½	0	1	–	–	–½
31	7	15	–	87	21	15	–	2	2	–	2	7	0	2	–	–	1
32	8	–	–	88	22	–	–	2	3	–	2	7½	0	3	–	–	1½
33	8	5	–	89	22	5	–	2	4	–	2	8	0	4	–	–	2
34	8	10	–	90	22	10	–	2	5	–	2	8½	0	5	–	–	2½
35	8	15	–	91	22	15	–	2	6	–	2	9	0	6	–	–	3
36	9	–	–	92	23	–	–	2	7	–	2	9¾	0	7	–	–	3¾
37	9	5	–	93	23	5	–	2	8	–	2	10¼	0	8	–	–	4¼
38	9	10	–	94	23	10	–	2	9	–	2	10¾	0	9	–	–	4¾
39	9	15	–	95	23	15	–	2	10	–	2	11¼	0	10	–	–	5¼
40	10	–	–	96	24	–	–	2	11	–	2	11¾	0	11	–	–	5¾
41	10	5	–	97	24	5	–	2	12	–	3	–¼	0	12	–	–	6¼
42	10	10	–	98	24	10	–	2	13	–	3	–¾	0	13	–	–	6¾
43	10	15	–	99	24	15	–	2	14	–	3	1½	0	14	–	–	7½
44	11	–	–	100	25	–	–	2	15	–	3	2	0	15	–	–	8
45	11	5	–	200	50	–	–	2	16	–	3	2½	0	16	–	–	8½
46	11	10	–	300	75	–	–	2	17	–	3	3	0	17	–	–	9
47	11	15	–	400	100	–	–	2	18	–	3	3½	0	18	–	–	9½
48	12	–	–	500	125	–	–	2	19	–	3	4	0	19	–	–	10
49	12	5	–	600	150	–	–	2	20	–	3	4½	0	20	–	–	10½
50	12	10	–	700	175	–	–	2	21	–	3	5¼	0	21	–	–	11¼
51	12	15	–	800	200	–	–	2	22	–	3	5¾	0	22	–	–	11¾
52	13	–	–	900	225	–	–	2	23	–	3	6¼	0	23	–	1	–¼
53	13	5	–	1000	250	–	–	2	24	–	3	6¾	0	24	–	1	–¾
54	13	10	–	2000	500	–	–	2	25	–	3	7¼	0	25	–	1	1¼
55	13	15	–	3000	750	–	–	2	26	–	3	7¾	0	26	–	1	1¾
56	14	–	–	4000	1000	–	–	2	27	–	3	8¼	0	27	–	1	2¼

5s. 3d. per Cwt.

£5. 5s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	5	3	57	14	19	3	1	–	–	1	3¾	3	–	–	3	11¼
2	–	10	6	58	15	4	6	1	1	–	1	4¼	3	1	–	3	11¾
3	–	15	9	59	15	9	9	1	2	–	1	4¾	3	2	–	4	–¼
4	1	1	–	60	15	15	–	1	3	–	1	5¼	3	3	–	4	–¾
5	1	6	3	61	16	–	3	1	4	–	1	6	3	4	–	4	1½
6	1	11	6	62	16	5	6	1	5	–	1	6½	3	5	–	4	2
7	1	16	9	63	16	10	9	1	6	–	1	7	3	6	–	4	2½
8	2	2	–	64	16	16	–	1	7	–	1	7½	3	7	–	4	3
9	2	7	3	65	17	1	3	1	8	–	1	8¼	3	8	–	4	3¾
10	2	12	6	66	17	6	6	1	9	–	1	8¾	3	9	–	4	4¼
11	2	17	9	67	17	11	9	1	10	–	1	9¼	3	10	–	4	4¾
12	3	3	–	68	17	17	–	1	11	–	1	9¾	3	11	–	4	5¼
13	3	8	3	69	18	2	3	1	12	–	1	10½	3	12	–	4	6
14	3	13	6	70	18	7	6	1	13	–	1	11	3	13	–	4	6½
15	3	18	9	71	18	12	9	1	14	–	1	11½	3	14	–	4	7
16	4	4	–	72	18	18	–	1	15	–	2	–	3	15	–	4	7½
17	4	9	3	73	19	3	3	1	16	–	2	–¾	3	16	–	4	8¼
18	4	14	6	74	19	8	6	1	17	–	2	1¼	3	17	–	4	8¾
19	4	19	9	75	19	13	9	1	18	–	2	1¾	3	18	–	4	9¼
20	5	5	–	76	19	19	–	1	19	–	2	2¼	3	19	–	4	9¾
21	5	10	3	77	20	4	3	1	20	–	2	3	3	20	–	4	10½
22	5	15	6	78	20	9	6	1	21	–	2	3½	3	21	–	4	11
23	6	–	9	79	20	14	9	1	22	–	2	4	3	22	–	4	11½
24	6	6	–	80	21	–	–	1	23	–	2	4½	3	23	–	5	–
25	6	11	3	81	21	5	3	1	24	–	2	5¼	3	24	–	5	–¾
26	6	16	6	82	21	10	6	1	25	–	2	5¾	3	25	–	5	1¼
27	7	1	9	83	21	15	9	1	26	–	2	6¼	3	26	–	5	1¾
28	7	7	–	84	22	1	–	1	27	–	2	6¾	3	27	–	5	2¼
29	7	12	3	85	22	6	3	2	—	–	2	7½	—	—	—	—	—
30	7	17	6	86	22	11	6	2	1	–	2	8	0	1	–	–	–½
31	8	2	9	87	22	16	9	2	2	–	2	8½	0	2	–	–	1
32	8	8	–	88	23	2	–	2	3	–	2	9	0	3	–	–	1½
33	8	13	3	89	23	7	3	2	4	–	2	9¾	0	4	–	–	2¼
34	8	18	6	90	23	12	6	2	5	–	2	10½	0	5	–	–	2¾
35	9	3	9	91	23	17	9	2	6	–	2	10¾	0	6	–	–	3¼
36	9	9	–	92	24	3	–	2	7	–	2	11¼	0	7	–	–	3¾
37	9	14	3	93	24	8	3	2	8	–	3	–	0	8	–	–	4½
38	9	19	6	94	24	13	6	2	9	–	3	–½	0	9	–	–	5
39	10	4	9	95	24	18	9	2	10	–	3	1	0	10	–	–	5½
40	10	10	–	96	25	4	–	2	11	–	3	1½	0	11	–	–	6
41	10	15	3	97	25	9	3	2	12	–	3	2¼	0	12	–	–	6¾
42	11	–	6	98	25	14	6	2	13	–	3	2¾	0	13	–	–	7¼
43	11	5	9	99	25	19	9	2	14	–	3	3¼	0	14	–	–	7¾
44	11	11	–	100	26	5	–	2	15	–	3	3¾	0	15	–	–	8¼
45	11	16	3	200	52	10	–	2	16	–	3	4½	0	16	–	–	9
46	12	1	6	300	78	15	–	2	17	–	3	5	0	17	–	–	9½
47	12	6	9	400	105	–	–	2	18	–	3	5½	0	18	–	–	10
48	12	12	–	500	131	5	–	2	19	–	3	6	0	19	–	–	10½
49	12	17	3	600	157	10	–	2	20	–	3	6¾	0	20	–	–	11¼
50	13	2	6	700	183	15	–	2	21	–	3	7¼	0	21	–	–	11¾
51	13	7	9	800	210	–	–	2	22	–	3	7¾	0	22	–	1	–¼
52	13	13	–	900	236	5	–	2	23	–	3	8¼	0	23	–	1	–¾
53	13	18	3	1000	262	10	–	2	24	–	3	9	0	24	–	1	1½
54	14	3	6	2000	525	–	–	2	25	–	3	9½	0	25	–	1	2
55	14	8	9	3000	787	10	–	2	26	–	3	10	0	26	–	1	2½
56	14	14	–	4000	1050	–	–	2	27	–	3	10½	0	27	–	1	3

£5. 10s. per Ton. 5s. 6d. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	5	6	57	15	13	6	1	–	–	1	4½	3	–	–	4	1½
2	–	11	–	58	15	19	–	1	1	–	1	5	3	1	–	4	2
3	–	16	6	59	16	4	6	1	2	–	1	5½	3	2	–	4	2½
4	1	2	–	60	16	10	–	1	3	–	1	6¼	3	3	–	4	3¼
5	1	7	6	61	16	15	6	1	4	–	1	6¾	3	4	–	4	3¾
6	1	13	–	62	17	1	–	1	5	–	1	7¼	3	5	–	4	4¼
7	1	18	6	63	17	6	6	1	6	–	1	8	3	6	–	4	5
8	2	4	–	64	17	12	–	1	7	–	1	8½	3	7	–	4	5½
9	2	9	6	65	17	17	6	1	8	–	1	9	3	8	–	4	6
10	2	15	–	66	18	3	–	1	9	–	1	9¾	3	9	–	4	6¾
11	3	–	6	67	18	8	6	1	10	–	1	10¼	3	10	–	4	7¼
12	3	6	–	68	18	14	–	1	11	–	1	10¾	3	11	–	4	7¾
13	3	11	6	69	18	19	6	1	12	–	1	11½	3	12	–	4	8½
14	3	17	–	70	19	5	–	1	13	–	2	–	3	13	–	4	9
15	4	2	6	71	19	10	6	1	14	–	2	–¾	3	14	–	4	9¾
16	4	8	–	72	19	16	–	1	15	–	2	1¼	3	15	–	4	10¼
17	4	13	6	73	20	1	6	1	16	–	2	1¾	3	16	–	4	10¾
18	4	19	–	74	20	7	–	1	17	–	2	2½	3	17	–	4	11½
19	5	4	6	75	20	12	6	1	18	–	2	3	3	18	–	5	–
20	5	10	–	76	20	18	–	1	19	–	2	3½	3	19	–	5	–½
21	5	15	6	77	21	3	6	1	20	–	2	4¼	3	20	–	5	1¼
22	6	1	–	78	21	9	–	1	21	–	2	4¾	3	21	–	5	1¾
23	6	6	6	79	21	14	6	1	22	–	2	5¼	3	22	–	5	2¼
24	6	12	–	80	22	–	–	1	23	–	2	6	3	23	–	5	3
25	6	17	6	81	22	5	6	1	24	–	2	6½	3	24	–	5	3½
26	7	3	–	82	22	11	–	1	25	–	2	7	3	25	–	5	4
27	7	8	6	83	22	16	6	1	26	–	2	7¾	3	26	–	5	4¾
28	7	14	–	84	23	2	–	1	27	–	2	8¼	3	27	–	5	5¼
29	7	19	6	85	23	7	6	2	—	–	2	9					
30	8	5	–	86	23	13	–	2	1	–	2	9½	0	1	–	–	–½
31	8	10	6	87	23	18	6	2	2	–	2	10	0	2	–	–	1
32	8	16	–	88	24	4	–	2	3	–	2	10¾	0	3	–	–	1¾
33	9	1	6	89	24	9	6	2	4	–	2	11¼	0	4	–	–	2¼
34	9	7	–	90	24	15	–	2	5	–	2	11¾	0	5	–	–	2¾
35	9	12	6	91	25	–	6	2	6	–	3	–½	0	6	–	–	3½
36	9	18	–	92	25	6	–	2	7	–	3	1	0	7	–	–	4
37	10	3	6	93	25	11	6	2	8	–	3	1½	0	8	–	–	4½
38	10	9	–	94	25	17	–	2	9	–	3	2¼	0	9	–	–	5¼
39	10	14	6	95	26	2	6	2	10	–	3	2¾	0	10	–	–	5¾
40	11	–	–	96	26	8	–	2	11	–	3	3¼	0	11	–	–	6¼
41	11	5	6	97	26	13	6	2	12	–	3	4	0	12	–	–	7
42	11	11	–	98	26	19	–	2	13	–	3	4½	0	13	–	–	7½
43	11	16	6	99	27	4	6	2	14	–	3	5¼	0	14	–	–	8¼
44	12	2	–	100	27	10	–	2	15	–	3	5¾	0	15	–	–	8¾
45	12	7	6	200	55	–	–	2	16	–	3	6¼	0	16	–	–	9¼
46	12	13	–	300	82	10	–	2	17	–	3	7	0	17	–	–	10
47	12	18	6	400	110	–	–	2	18	–	3	7½	0	18	–	–	10½
48	13	4	–	500	137	10	–	2	19	–	3	8	0	19	–	–	11
49	13	9	6	600	165	–	–	2	20	–	3	8¾	0	20	–	–	11¾
50	13	15	–	700	192	10	–	2	21	–	3	9½	0	21	–	1	–¼
51	14	–	6	800	220	–	–	2	22	–	3	9¾	0	22	–	1	–¾
52	14	6	–	900	247	10	–	2	23	–	3	10½	0	23	–	1	1½
53	14	11	6	1000	275	–	–	2	24	–	3	11	0	24	–	1	2
54	14	17	–	2000	550	–	–	2	25	–	3	11½	0	25	–	1	2½
55	15	2	6	3000	825	–	–	2	26	–	4	–¼	0	26	–	1	3¼
56	15	8	–	4000	1100	–	–	2	27	–	4	–¾	0	27	–	1	3¾

5*s*. 9*d*. *per Cwt*.

£5. 15*s*. *per Ton*.

Cwt	£.	s.	d.	wt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	5	9	57	16	7	9	1	–	–	1	5¼	3	–	–	4	3¾
2	–	11	6	58	16	13	6	1	1	–	1	5¾	3	1	–	4	4¼
3	–	17	3	59	16	19	3	1	2	–	1	6¼	3	2	–	4	4¾
4	1	3	–	60	17	5	–	1	3	–	1	7	3	3	–	4	5½
5	1	8	9	61	17	10	9	1	4	–	1	7½	3	4	–	4	6
6	1	14	6	62	17	16	6	1	5	–	1	8¼	3	5	–	4	6¾
7	2	–	3	63	18	2	3	1	6	–	1	8¾	3	6	–	4	7¼
8	2	6	–	64	18	8	–	1	7	–	1	9½	3	7	–	4	8
9	2	11	9	65	18	13	9	1	8	–	1	10	3	8	–	4	8½
10	2	17	6	66	18	19	6	1	9	–	1	10¾	3	9	–	4	9¼
11	3	3	3	67	19	5	3	1	10	–	1	11¼	3	10	–	4	9¾
12	3	9	–	68	19	11	–	1	11	–	2	–	3	11	–	4	10½
13	3	14	9	69	19	16	9	1	12	–	2	–½	3	12	–	4	11
14	4	–	6	70	20	2	6	1	13	–	2	1¼	3	13	–	4	11¾
15	4	6	3	71	20	8	3	1	14	–	2	1¾	3	14	–	5	–¼
16	4	12	–	72	20	14	–	1	15	–	2	2¼	3	15	–	5	–¾
17	4	17	9	73	20	19	9	1	16	–	2	3	3	16	–	5	1½
18	5	3	6	74	21	5	6	1	17	–	2	3½	3	17	–	5	2
19	5	9	3	75	21	11	3	1	18	–	2	4¼	3	18	–	5	2¾
20	5	15	–	76	21	17	–	1	19	–	2	4¾	3	19	–	5	3¼
21	6	–	9	77	22	2	9	1	20	–	2	5½	3	20	–	5	4
22	6	6	6	78	22	8	6	1	21	–	2	6	3	21	–	5	4½
23	6	12	3	79	22	14	3	1	22	–	2	6¾	3	22	–	5	5¼
24	6	18	–	80	23	–	–	1	23	–	2	7¼	3	23	–	5	5¾
25	7	3	9	81	23	5	9	1	24	–	2	8	3	24	–	5	6½
26	7	9	6	82	23	11	6	1	25	–	2	8½	3	25	–	5	7
27	7	15	3	83	23	17	3	1	26	–	2	9¼	3	26	–	5	7¾
28	8	1	–	84	24	3	–	1	27	–	2	9¾	3	27	–	5	8¼
29	8	6	9	85	24	8	9	2	—	–	2	10½					
30	8	12	6	86	24	14	6	2	1	–	2	11	0	1	–	–	–½
31	8	18	3	87	25	–	3	2	2	–	2	11½	0	2	–	–	1
32	9	4	–	88	25	6	–	2	3	–	3	–¼	0	3	–	–	1¾
33	9	9	9	89	25	11	9	2	4	–	3	–¾	0	4	–	–	2¼
34	9	15	6	90	25	17	6	2	5	–	3	1½	0	5	–	–	3
35	10	1	3	91	26	3	3	2	6	–	3	2	0	6	–	–	3½
36	10	7	–	92	26	9	–	2	7	–	3	2¾	0	7	–	–	4¼
37	10	12	9	93	26	14	9	2	8	–	3	3¼	0	8	–	–	4¾
38	10	18	6	94	27	–	6	2	9	–	3	4	0	9	–	–	5½
39	11	4	3	95	27	6	3	2	10	–	3	4½	0	10	–	–	6
40	11	10	–	96	27	12	–	2	11	–	3	5¼	0	11	–	–	6¾
41	11	15	9	97	27	17	9	2	12	–	3	5¾	0	12	–	–	7¼
42	12	1	6	98	28	3	6	2	13	–	3	6½	0	13	–	–	8
43	12	7	3	99	28	9	3	2	14	–	3	7	0	14	–	–	8½
44	12	13	–	100	28	15	–	2	15	–	3	7½	0	15	–	–	9
45	12	18	9	200	57	10	–	2	16	–	3	8¼	0	16	–	–	9¾
46	13	4	6	300	86	5	–	2	17	–	3	8¾	0	17	–	–	10¼
47	13	10	3	400	115	–	–	2	18	–	3	9½	0	18	–	–	11
48	13	16	–	500	143	15	–	2	19	–	3	10	0	19	–	–	11½
49	14	1	9	600	172	10	–	2	20	–	3	10¾	0	20	–	1	–¼
50	14	7	6	700	201	5	–	2	21	–	3	11¼	0	21	–	1	–¾
51	14	13	3	800	230	–	–	2	22	–	4	–	0	22	–	1	1½
52	14	19	–	900	258	15	–	2	23	–	4	–½	0	23	–	1	2
53	15	4	9	1000	287	10	–	2	24	–	4	1¼	0	24	–	1	2¾
54	15	10	6	2000	575	–	–	2	25	–	4	1¾	0	25	–	1	3¼
55	15	16	3	3000	862	10	–	2	26	–	4	2½	0	26	–	1	4
56	16	2	–	4000	1150	–	–	2	27	–	4	3	0	27	–	1	4½

£6. *per Ton.*

6*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	6	–	57	17	2	–	1	–	–	1	6	3	–	–	4	6
2	–	12	–	58	17	8	–	1	1	–	1	6½	3	1	–	4	6½
3	–	18	–	59	17	14	–	1	2	–	1	7¼	3	2	–	4	7¼
4	1	4	–	60	18	–	–	1	3	–	1	7¾	3	3	–	4	7¾
5	1	10	–	61	18	6	–	1	4	–	1	8½	3	4	–	4	8½
6	1	16	–	62	18	12	–	1	5	–	1	9	3	5	–	4	9
7	2	2	–	63	18	18	–	1	6	–	1	9¾	3	6	–	4	9¾
8	2	8	–	64	19	4	–	1	7	–	1	10½	3	7	–	4	10½
9	2	14	–	65	19	10	–	1	8	–	1	11	3	8	–	4	11
10	3	–	–	66	19	16	–	1	9	–	1	11¾	3	9	–	4	11¾
11	3	6	–	67	20	2	–	1	10	–	2	–¼	3	10	–	5	–¼
12	3	12	–	68	20	8	–	1	11	–	2	1	3	11	–	5	1
13	3	18	–	69	20	14	–	1	12	–	2	1½	3	12	–	5	1½
14	4	4	–	70	21	–	–	1	13	–	2	2¼	3	13	–	5	2¼
15	4	10	–	71	21	6	–	1	14	–	2	3	3	14	–	5	3
16	4	16	–	72	21	12	–	1	15	–	2	3½	3	15	–	5	3½
17	5	2	–	73	21	18	–	1	16	–	2	4¼	3	16	–	5	4¼
18	5	8	–	74	22	4	–	1	17	–	2	4¾	3	17	–	5	4¾
19	5	14	–	75	22	10	–	1	18	–	2	5½	3	18	–	5	5½
20	6	–	–	76	22	16	–	1	19	–	2	6	3	19	–	5	6
21	6	6	–	77	23	2	–	1	20	–	2	6¾	3	20	–	5	6¾
22	6	12	–	78	23	8	–	1	21	–	2	7½	3	21	–	5	7½
23	6	18	–	79	23	14	–	1	22	–	2	8	3	22	–	5	8
24	7	4	–	80	24	–	–	1	23	–	2	8¾	3	23	–	5	8¾
25	7	10	–	81	24	6	–	1	24	–	2	9¼	3	24	–	5	9¼
26	7	16	–	82	24	12	–	1	25	–	2	10	3	25	–	5	10
27	8	2	–	83	24	18	–	1	26	–	2	10½	3	26	–	5	10½
28	8	8	–	84	25	4	–	1	27	–	2	11¼	3	27	–	5	11¼
29	8	14	–	85	25	10	–	2	—	–	3	–					
30	9	–	–	86	25	16	–	2	1	–	3	–½	0	1	–	–	–½
31	9	6	–	87	26	2	–	2	2	–	3	1¼	0	2	–	–	1¼
32	9	12	–	88	26	8	–	2	3	–	3	1¾	0	3	–	–	1¾
33	9	18	–	89	26	14	–	2	4	–	3	2½	0	4	–	–	2½
34	10	4	–	90	27	–	–	2	5	–	3	3	0	5	–	–	3
35	10	10	–	91	27	6	–	2	6	–	3	3¾	0	6	–	–	3¾
36	10	16	–	92	27	12	–	2	7	–	3	4½	0	7	–	–	4½
37	11	2	–	93	27	18	–	2	8	–	3	5	0	8	–	–	5
38	11	8	–	94	28	4	–	2	9	–	3	5¾	0	9	–	–	5¾
39	11	14	–	95	28	10	–	2	10	–	3	6¼	0	10	–	–	6¼
40	12	–	–	96	28	16	–	2	11	–	3	7	0	11	–	–	7
41	12	6	–	97	29	2	–	2	12	–	3	7½	0	12	–	–	7½
42	12	12	–	98	29	8	–	2	13	–	3	8¼	0	13	–	–	8¼
43	12	18	–	99	29	14	–	2	14	–	3	9	0	14	–	–	9
44	13	4	–	100	30	–	–	2	15	–	3	9½	0	15	–	–	9½
45	13	10	–	200	60	–	–	2	16	–	3	10¼	0	16	–	–	10¼
46	13	16	–	300	90	–	–	2	17	–	3	10¾	0	17	–	–	10¾
47	14	2	–	400	120	–	–	2	18	–	3	11½	0	18	–	–	11½
48	14	8	–	500	150	–	–	2	19	–	4	–	0	19	–	1	–
49	14	14	–	600	180	–	–	2	20	–	4	–¾	0	20	–	1	–¾
50	15	–	–	700	210	–	–	2	21	–	4	1½	0	21	–	1	1½
51	15	6	–	800	240	–	–	2	22	–	4	2	0	22	–	1	2
52	15	12	–	900	270	–	–	2	23	–	4	2¾	0	23	–	1	2¾
53	15	18	–	1000	300	–	–	2	24	–	4	3¼	0	24	–	1	3¼
54	16	4	–	2000	600	–	–	2	25	–	4	4	0	25	–	1	4
55	16	10	–	3000	900	–	–	2	26	–	4	4½	0	26	–	1	4½
56	16	16	–	4000	1200	–	–	2	27	–	4	5¼	0	27	–	1	5¼

6*s.* 3*d.* *per Cwt.*

£6. 5*s.* *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	6	3	57	17	16	3	1	–	–	1	6¾	3	–	–	4	8¼
2	–	12	6	58	18	2	6	1	1	–	1	7¼	3	1	–	4	8¾
3	–	18	9	59	18	8	9	1	2	–	1	8	3	2	–	4	9½
4	1	5	–	60	18	15	–	1	3	–	1	8¾	3	3	–	4	10¼
5	1	11	3	61	19	1	3	1	4	–	1	9¼	3	4	–	4	10¾
6	1	17	6	62	19	7	6	1	5	–	1	10	3	5	–	4	11½
7	2	3	9	63	19	13	9	1	6	–	1	10¾	3	6	–	5	–¼
8	2	10	–	64	20	–	–	1	7	–	1	11¼	3	7	–	5	–¾
9	2	16	3	65	20	6	3	1	8	–	2	–	3	8	–	5	1½
10	3	2	6	66	20	12	6	1	9	–	2	–¾	3	9	–	5	2¼
11	3	8	9	67	20	18	9	1	10	–	2	1¼	3	10	–	5	2¾
12	3	15	–	68	21	5	–	1	11	–	2	2	3	11	–	5	3½
13	4	1	3	69	21	11	3	1	12	–	2	2¾	3	12	–	5	4¼
14	4	7	6	70	21	17	6	1	13	–	2	3¼	3	13	–	5	4¾
15	4	13	9	71	22	3	9	1	14	–	2	4	3	14	–	5	5½
16	5	–	–	72	22	10	–	1	15	–	2	4¾	3	15	–	5	6¼
17	5	6	3	73	22	16	3	1	16	–	2	5¼	3	16	–	5	6¾
18	5	12	6	74	23	2	6	1	17	–	2	6	3	17	–	5	7½
19	5	18	9	75	23	8	9	1	18	–	2	6¾	3	18	–	5	8¼
20	6	5	–	76	23	15	–	1	19	–	2	7¼	3	19	–	5	8¾
21	6	11	3	77	24	1	3	1	20	–	2	8	3	20	–	5	9½
22	6	17	6	78	24	7	6	1	21	–	2	8¾	3	21	–	5	10¼
23	7	3	9	79	24	13	9	1	22	–	2	9¼	3	22	–	5	10¾
24	7	10	–	80	25	–	–	1	23	–	2	10	3	23	–	5	11½
25	7	16	3	81	25	6	3	1	24	–	2	10¾	3	24	–	6	–¼
26	8	2	6	82	25	12	6	1	25	–	2	11¼	3	25	–	6	–¾
27	8	8	9	83	25	18	9	1	26	–	3	–	3	26	–	6	1½
28	8	15	–	84	26	5	–	1	27	–	3	–¾	3	27	–	6	2¼
29	9	1	3	85	26	11	3	2	—	–	3	1½					
30	9	7	6	86	26	17	6	2	1	–	3	2	0	1	–	–	–½
31	9	13	9	87	27	3	9	2	2	–	3	2¾	0	2	–	–	1¼
32	10	–	–	88	27	10	–	2	3	–	3	3½	0	3	–	–	2
33	10	6	3	89	27	16	3	2	4	–	3	4	0	4	–	–	2½
34	10	12	6	90	28	2	6	2	5	–	3	4¾	0	5	–	–	3¼
35	10	18	9	91	28	8	9	2	6	–	3	5½	0	6	–	–	4
36	11	5	–	92	28	15	–	2	7	–	3	6	0	7	–	–	4½
37	11	11	3	93	29	1	3	2	8	–	3	6¾	0	8	–	–	5¼
38	11	17	6	94	29	7	6	2	9	–	3	7½	0	9	–	–	6
39	12	3	9	95	29	13	9	2	10	–	3	8	0	10	–	–	6½
40	12	10	–	96	30	–	–	2	11	–	3	8¾	0	11	–	–	7¼
41	12	16	3	97	30	6	3	2	12	–	3	9½	0	12	–	–	8
42	13	2	6	98	30	12	6	2	13	–	3	10	0	13	–	–	8½
43	13	8	9	99	30	18	9	2	14	–	3	10¾	0	14	–	–	9¼
44	13	15	–	100	31	5	–	2	15	–	3	11½	0	15	–	–	10
45	14	1	3	200	62	10	–	2	16	–	4	–	0	16	–	–	10½
46	14	7	6	300	93	15	–	2	17	–	4	–¾	0	17	–	–	11¼
47	14	13	9	400	125	–	–	2	18	–	4	1½	0	18	–	1	–
48	15	–	–	500	156	5	–	2	19	–	4	2	0	19	–	1	–½
49	15	6	3	600	187	10	–	2	20	–	4	2¾	0	20	–	1	1¼
50	15	12	6	700	218	15	–	2	21	–	4	3½	0	21	–	1	2
51	15	18	9	800	250	–	–	2	22	–	4	4	0	22	–	1	2½
52	16	5	–	900	281	5	–	2	23	–	4	4¾	0	23	–	1	3¼
53	16	11	3	1000	312	10	–	2	24	–	4	5½	0	24	–	1	4
54	16	17	6	2000	625	–	–	2	25	–	4	6	0	25	–	1	4½
55	17	3	9	3000	937	10	–	2	26	–	4	6¾	0	26	–	1	5¼
56	17	10	–	4000	1250	–	–	2	27	–	4	7½	0	27	–	1	6

£6. 10*s*. *per Ton*. 6*s*. 6*d*. *per Cwt*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	~	6	6	57	18	10	6	1	~	~	1	7½	3	~	~	4	10½
2	~	13	~	58	18	17	~	1	1	~	1	8	3	1	~	4	11
3	~	19	6	59	19	3	6	1	2	~	1	8¾	3	2	~	4	11¾
4	1	6	~	60	19	10	~	1	3	~	1	9½	3	3	~	5	~½
5	1	12	6	61	19	16	6	1	4	~	1	10¼	3	4	~	5	1¼
6	1	19	~	62	20	3	~	1	5	~	1	10¾	3	5	~	5	1¾
7	2	5	6	63	20	9	6	1	6	~	1	11½	3	6	~	5	2½
8	2	12	~	64	20	16	~	1	7	~	2	~¼	3	7	~	5	3¼
9	2	18	6	65	21	2	6	1	8	~	2	1	3	8	~	5	4
10	3	5	~	66	21	9	~	1	9	~	2	1¾	3	9	~	5	4¾
11	3	11	6	67	21	15	6	1	10	~	2	2¼	3	10	~	5	5¼
12	3	18	~	68	22	2	~	1	11	~	2	3	3	11	~	5	6
13	4	4	6	69	22	8	6	1	12	~	2	3¾	3	12	~	5	6¾
14	4	11	~	70	22	15	~	1	13	~	2	4½	3	13	~	5	7½
15	4	17	6	71	23	1	6	1	14	~	2	5¼	3	14	~	5	8¼
16	5	4	~	72	23	8	~	1	15	~	2	5¾	3	15	~	5	8¾
17	5	10	6	73	23	14	6	1	16	~	2	6½	3	16	~	5	9½
18	5	17	~	74	24	1	~	1	17	~	2	7¼	3	17	~	5	10¼
19	6	3	6	75	24	7	6	1	18	~	2	8	3	18	~	5	11
20	6	10	~	76	24	14	~	1	19	~	2	8½	3	19	~	5	11½
21	6	16	6	77	25	~	6	1	20	~	2	9¼	3	20	~	6	~¼
22	7	3	~	78	25	7	~	1	21	~	2	10	3	21	~	6	1
23	7	9	6	79	25	13	6	1	22	~	2	10¾	3	22	~	6	1¾
24	7	16	~	80	26	~	~	1	23	~	2	11½	3	23	~	6	2½
25	8	2	6	81	26	6	6	1	24	~	3	~	3	24	~	6	3
26	8	9	~	82	26	13	~	1	25	~	3	~¾	3	25	~	6	3¾
27	8	15	6	83	26	19	6	1	26	~	3	1½	3	26	~	6	4½
28	9	2	~	84	27	6	~	1	27	~	3	2¼	3	27	~	6	5¼
29	9	8	6	85	27	12	6	2	—	~	3	3					
30	9	15	~	86	27	19	~	2	1	~	3	3½	0	1	~	~	~½
31	10	1	6	87	28	5	6	2	2	~	3	4¼	0	2	~	~	1¼
32	10	8	~	88	28	12	~	2	3	~	3	5	0	3	~	~	2
33	10	14	6	89	28	18	6	2	4	~	3	5¾	0	4	~	~	2¾
34	11	1	~	90	29	5	~	2	5	~	3	6¼	0	5	~	~	3¼
35	11	7	6	91	29	11	6	2	6	~	3	7	0	6	~	~	4
36	11	14	~	92	29	18	~	2	7	~	3	7¾	0	7	~	~	4¾
37	12	~	6	93	30	4	6	2	8	~	3	8½	0	8	~	~	5½
38	12	7	~	94	30	11	~	2	9	~	3	9¼	0	9	~	~	6¼
39	12	13	6	95	30	17	6	2	10	~	3	9¾	0	10	~	~	6¾
40	13	~	~	96	31	4	~	2	11	~	3	10½	0	11	~	~	7½
41	13	6	6	97	31	10	6	2	12	~	3	11¼	0	12	~	~	8¼
42	13	13	~	98	31	17	~	2	13	~	4	~	0	13	~	~	9
43	13	19	6	99	32	3	6	2	14	~	4	~¾	0	14	~	~	9¾
44	14	6	~	100	32	10	~	2	15	~	4	1¼	0	15	~	~	10¼
45	14	12	6	200	65	~	~	2	16	~	4	2	0	16	~	~	11
46	14	19	~	300	97	10	~	2	17	~	4	2¾	0	17	~	~	11¾
47	15	5	6	400	130	~	~	2	18	~	4	3½	0	18	~	1	~½
48	15	12	~	500	162	10	~	2	19	~	4	4	0	19	~	1	1
49	15	18	6	600	195	~	~	2	20	~	4	4¾	0	20	~	1	1¾
50	16	5	~	700	227	10	~	2	21	~	4	5½	0	21	~	1	2½
51	16	11	6	800	260	~	~	2	22	~	4	6¼	0	22	~	1	3¼
52	16	18	~	900	292	10	~	2	23	~	4	7	0	23	~	1	4
53	17	4	6	1000	325	~	~	2	24	~	4	7½	0	24	~	1	4½
54	17	11	~	2000	650	~	~	2	25	~	4	8¼	0	25	~	1	5¼
55	17	17	6	3000	975	~	~	2	26	~	4	9	0	26	~	1	6
56	18	4	~	4000	1300	~	~	2	27	~	4	9¾	0	27	~	1	6¾

6*s*. 9*d*. *per Cwt*. **£6. 15*s*. *per Ton*.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	6	9	57	19	4	9	1	–	–	1	8¼	3	–	–	5	–¾
2	–	13	6	58	19	11	6	1	1	–	1	8¾	3	1	–	5	1¼
3	1	–	3	59	19	18	3	1	2	–	1	9½	3	2	–	5	2
4	1	7	–	60	20	5	–	1	3	–	1	10¼	3	3	–	5	2¾
5	1	13	9	61	20	11	9	1	4	–	1	11	3	4	–	5	3½
6	2	–	6	62	20	18	6	1	5	–	1	11¾	3	5	–	5	4¼
7	2	7	3	63	21	5	3	1	6	–	2	–½	3	6	–	5	5
8	2	14	–	64	21	12	–	1	7	–	2	1¼	3	7	–	5	5¾
9	3	–	9	65	21	18	9	1	8	–	2	2	3	8	–	5	6½
10	3	7	6	66	22	5	6	1	9	–	2	2¾	3	9	–	5	7¼
11	3	14	3	67	22	12	3	1	10	–	2	3¼	3	10	–	5	7¾
12	4	1	–	68	22	19	–	1	11	–	2	4	3	11	–	5	8½
13	4	7	9	69	23	5	9	1	12	–	2	4¾	3	12	–	5	9¼
14	4	14	6	70	23	12	6	1	13	–	2	5½	3	13	–	5	10
15	5	1	3	71	23	19	3	1	14	–	2	6¼	3	14	–	5	10¾
16	5	8	–	72	24	6	–	1	15	–	2	7	3	15	–	5	11½
17	5	14	9	73	24	12	9	1	16	–	2	7¾	3	16	–	6	–¼
18	6	1	6	74	24	19	6	1	17	–	2	8½	3	17	–	6	1
19	6	8	3	75	25	6	3	1	18	–	2	9¼	3	18	–	6	1¾
20	6	15	–	76	25	13	–	1	19	–	2	9¾	3	19	–	6	2¼
21	7	1	9	77	25	19	9	1	20	–	2	10½	3	20	–	6	3
22	7	8	6	78	26	6	6	1	21	–	2	11¼	3	21	–	6	3¾
23	7	15	3	79	26	13	3	1	22	–	3	–	3	22	–	6	4½
24	8	2	–	80	27	–	–	1	23	–	3	–¾	3	23	–	6	5¼
25	8	8	9	81	27	6	9	1	24	–	3	1½	3	24	–	6	6
26	8	15	6	82	27	13	6	1	25	–	3	2¼	3	25	–	6	6¾
27	9	2	3	83	28	–	3	1	26	–	3	3	3	26	–	6	7½
28	9	9	–	84	28	7	–	1	27	–	3	3¾	3	27	–	6	8¼
29	9	15	9	85	28	13	9	2	—	–	3	4½					
30	10	2	6	86	29	–	6	2	1	–	3	5	0	1	–	–	–½
31	10	9	3	87	29	7	3	2	2	–	3	5¾	0	2	–	–	1¼
32	10	16	–	88	29	14	–	2	3	–	3	6½	0	3	–	–	2
33	11	2	9	89	30	–	9	2	4	–	3	7¼	0	4	–	–	2¾
34	11	9	6	90	30	7	6	2	5	–	3	8	0	5	–	–	3½
35	11	16	3	91	30	14	3	2	6	–	3	8¾	0	6	–	–	4¼
36	12	3	–	92	31	1	–	2	7	–	3	9½	0	7	–	–	5
37	12	9	9	93	31	7	9	2	8	–	3	10¼	0	8	–	–	5¾
38	12	16	6	94	31	14	6	2	9	–	3	11	0	9	–	–	6½
39	13	3	3	95	32	1	3	2	10	–	3	11½	0	10	–	–	7
40	13	10	–	96	32	8	–	2	11	–	4	–¼	0	11	–	–	7¾
41	13	16	9	97	32	14	9	2	12	–	4	1	0	12	–	–	8½
42	14	3	6	98	33	1	6	2	13	–	4	1¾	0	13	–	–	9¼
43	14	10	3	93	32	8	3	2	14	–	4	2½	0	14	–	–	10
44	14	17	–	100	33	15	–	2	15	–	4	3¼	0	15	–	–	10¾
45	15	3	9	200	67	10	–	2	16	–	4	4	0	16	–	–	11½
46	15	10	6	300	101	5	–	2	17	–	4	4¾	0	17	–	1	–¼
47	15	17	3	400	135	–	–	2	18	–	4	5½	0	18	–	1	1
48	16	4	–	500	168	15	–	2	19	–	4	6	0	19	–	1	1½
49	16	10	9	600	202	10	–	2	20	–	4	6¾	0	20	–	1	2¼
50	16	17	6	700	236	5	–	2	21	–	4	7½	0	21	–	1	3
51	17	4	3	800	270	–	–	2	22	–	4	8¼	0	22	–	1	3¾
52	17	11	–	900	303	15	–	2	23	–	4	9	0	23	–	1	4½
53	17	17	9	1000	337	10	–	2	24	–	4	9¾	0	24	–	1	5¼
54	18	4	6	2000	675	–	–	2	25	–	4	10½	0	25	–	1	6
55	18	11	3	3000	1012	10	–	2	26	–	4	11¼	0	26	–	1	6¾
56	18	18	–	4000	1350	–	–	2	27	–	5	–	0	27	–	1	7½

£7. per Ton. *¾ per lb.* *7s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	7	–	57	19	19	–	1	–	–	1	9	3	–	–	5	3
2	–	14	–	58	20	6	–	1	1	–	1	9¾	3	1	–	5	3¾
3	1	1	–	59	20	13	–	1	2	–	1	10½	3	2	–	5	4½
4	1	8	–	60	21	–	–	1	3	–	1	11¼	3	3	–	5	5¼
5	1	15	–	61	21	7	–	1	4	–	2	–	3	4	–	5	6
6	2	2	–	62	21	14	–	1	5	–	2	–¾	3	5	–	5	6¾
7	2	9	–	63	22	1	–	1	6	–	2	1½	3	6	–	5	7½
8	2	16	–	64	22	8	–	1	7	–	2	2¼	3	7	–	5	8¼
9	3	3	–	65	22	15	–	1	8	–	2	3	3	8	–	5	9
10	3	10	–	66	23	2	–	1	9	–	2	3¾	3	9	–	5	9¾
11	3	17	–	67	23	9	–	1	10	–	2	4½	3	10	–	5	10½
12	4	4	–	68	23	16	–	1	11	–	2	5¼	3	11	–	5	11¼
13	4	11	–	69	24	3	–	1	12	–	2	6	3	12	–	6	–
14	4	18	–	70	24	10	–	1	13	–	2	6¾	3	13	–	6	–¾
15	5	5	–	71	24	17	–	1	14	–	2	7½	3	14	–	6	1½
16	5	12	–	72	25	4	–	1	15	–	2	8¼	3	15	–	6	2¼
17	5	19	–	73	25	11	–	1	16	–	2	9	3	16	–	6	3
18	6	6	–	74	25	18	–	1	17	–	2	9¾	3	17	–	6	3¾
19	6	13	–	75	26	5	–	1	18	–	2	10½	3	18	–	6	4½
20	7	–	–	76	26	12	–	1	19	–	2	11¼	3	19	–	6	5¼
21	7	7	–	77	26	19	–	1	20	–	3	–	3	20	–	6	6
22	7	14	–	78	27	6	–	1	21	–	3	–¾	3	21	–	6	6¾
23	8	1	–	79	27	13	–	1	22	–	3	1½	3	22	–	6	7½
24	8	8	–	80	28	–	–	1	23	–	3	2¼	3	23	–	6	8¼
25	8	15	–	81	28	7	–	1	24	–	3	3	3	24	–	6	9
26	9	2	–	82	28	14	–	1	25	–	3	3¾	3	25	–	6	9¾
27	9	9	–	83	29	1	–	1	26	–	3	4½	3	26	–	6	10½
28	9	16	–	84	29	8	–	1	27	–	3	5¼	3	27	–	6	11¼
29	10	3	–	85	29	15	–	2	—	–	3	6					
30	10	10	–	86	30	2	–	2	1	–	3	6¾	0	1	–	–	–¾
31	10	17	–	87	30	9	–	2	2	–	3	7½	0	2	–	–	1½
32	11	4	–	88	30	16	–	2	3	–	3	8¼	0	3	–	–	2¼
33	11	11	–	89	31	3	–	2	4	–	3	9	0	4	–	–	3
34	11	18	–	90	31	10	–	2	5	–	3	9¾	0	5	–	–	3¾
35	12	5	–	91	31	17	–	2	6	–	3	10½	0	6	–	–	4½
36	12	12	–	92	32	4	–	2	7	–	3	11¼	0	7	–	–	5¼
37	12	19	–	93	32	11	–	2	8	–	4	–	0	8	–	–	6
38	13	6	–	94	32	18	–	2	9	–	4	–¾	0	9	–	–	6¾
39	13	13	–	95	33	5	–	2	10	–	4	1½	0	10	–	–	7½
40	14	–	–	96	33	12	–	2	11	–	4	2¼	0	11	–	–	8¼
41	14	7	–	97	33	19	–	2	12	–	4	3	0	12	–	–	9
42	14	14	–	98	34	6	–	2	13	–	4	3¾	0	13	–	–	9¾
43	15	1	–	99	34	13	–	2	14	–	4	4½	0	14	–	–	10½
44	15	8	–	100	35	–	–	2	15	–	4	5¼	0	15	–	–	11¼
45	15	15	–	200	70	–	–	2	16	–	4	6	0	16	–	1	–
46	16	2	–	300	105	–	–	2	17	–	4	6¾	0	17	–	1	–¾
47	16	9	–	400	140	–	–	2	18	–	4	7½	0	18	–	1	1½
48	16	16	–	500	175	–	–	2	19	–	4	8¼	0	19	–	1	2¼
49	17	3	–	600	210	–	–	2	20	–	4	9	0	20	–	1	3
50	17	10	–	700	245	–	–	2	21	–	4	9¾	0	21	–	1	3¾
51	17	17	–	800	280	–	–	2	22	–	4	10½	0	22	–	1	4½
52	18	4	–	900	315	–	–	2	23	–	4	11¼	0	23	–	1	5¼
53	18	11	–	1000	350	–	–	2	24	–	5	–	0	24	–	1	6
54	18	18	–	2000	700	–	–	2	25	–	5	–¾	0	25	–	1	6¾
55	19	5	–	3000	1050	–	–	2	26	–	5	1½	0	26	–	1	7½
56	19	12	–	4000	1400	–	–	2	27	–	5	2¼	0	27	–	1	8¼

7s. 3d. per Cwt. *£7. 5s. per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	7	3	57	20	13	3	1	–	–	1	9¾	3	–	–	5	5¼
2	–	14	6	58	21	–	6	1	1	–	1	10½	3	1	–	5	6
3	1	1	9	59	21	7	9	1	2	–	1	11¼	3	2	–	5	6¾
4	1	9	–	60	21	15	–	1	3	–	2	–	3	3	–	5	7½
5	1	16	3	61	22	2	3	1	4	–	2	–¾	3	4	–	5	8¼
6	2	3	6	62	22	9	6	1	5	–	2	1½	3	5	–	5	9
7	2	10	9	63	22	16	9	1	6	–	2	2¼	3	6	–	5	9¾
8	2	18	–	64	23	4	–	1	7	–	2	3	3	7	–	5	10½
9	3	5	3	65	23	11	3	1	8	–	2	3¾	3	8	–	5	11¼
10	3	12	6	66	23	18	6	1	9	–	2	4½	3	9	–	6	–
11	3	19	9	67	24	5	9	1	10	–	2	5½	3	10	–	6	1
12	4	7	–	68	24	13	–	1	11	–	2	6¼	3	11	–	6	1¾
13	4	14	3	69	25	–	3	1	12	–	2	7	3	12	–	6	2½
14	5	1	6	70	25	7	6	1	13	–	2	7¾	3	13	–	6	3¼
15	5	8	9	71	25	14	9	1	14	–	2	8½	3	14	–	6	4
16	5	16	–	72	26	2	–	1	15	–	2	9¼	3	15	–	6	4¾
17	6	3	3	73	26	9	3	1	16	–	2	10	3	16	–	6	5½
18	6	10	6	74	26	16	6	1	17	–	2	10¾	3	17	–	6	6¼
19	6	17	9	75	27	3	9	1	18	–	2	11½	3	18	–	6	7
20	7	5	–	76	27	11	–	1	19	–	3	–½	3	19	–	6	8
21	7	12	3	77	27	18	3	1	20	–	3	1¼	3	20	–	6	8¾
22	7	19	6	78	28	5	6	1	21	–	3	2	3	21	–	6	9½
23	8	6	9	79	28	12	9	1	22	–	3	2¾	3	22	–	6	10¼
24	8	14	–	80	29	–	–	1	23	–	3	3½	3	23	–	6	11
25	9	1	3	81	29	7	3	1	24	–	3	4¼	3	24	–	6	11¾
26	9	8	6	82	29	14	6	1	25	–	3	5	3	25	–	7	–½
27	9	15	9	83	30	1	9	1	26	–	3	5¾	3	26	–	7	1¼
28	10	3	–	84	30	9	–	1	27	–	3	6½	3	27	–	7	2
29	10	10	3	85	30	16	3	2	—	–	3	7½					
30	10	17	6	86	31	3	6	2	1	–	3	8¼	0	1	–	–	–¾
31	11	4	9	87	31	10	9	2	2	–	3	9	0	2	–	–	1½
32	11	12	–	88	31	18	–	2	3	–	3	9¾	0	3	–	–	2¼
33	11	19	3	89	32	5	3	2	4	–	3	10½	0	4	–	–	3
34	12	6	6	90	32	12	6	2	5	–	3	11¼	0	5	–	–	3¾
35	12	13	9	91	32	19	9	2	6	–	4	–	0	6	–	–	4½
36	13	1	–	92	33	7	–	2	7	–	4	–¾	0	7	–	–	5¼
37	13	8	3	93	33	14	3	2	8	–	4	1½	0	8	–	–	6
38	13	15	6	94	34	1	6	2	9	–	4	2¼	0	9	–	–	6¾
39	14	2	9	95	34	8.	9	2	10	–	4	3¼	0	10	–	–	7¾
40	14	10	–	96	34	16	–	2	11	–	4	4	0	11	–	–	8½
41	14	17	3	97	35	3	3	2	12	–	4	4¾	0	12	–	–	9¼
42	15	4	6	98	35	10	6	2	13	–	4	5½	0	13	–	–	10
43	15	11	9	99	35	17	9	2	14	–	4	6¼	0	14	–	–	10¾
44	15	19	–	100	36	5	–	2	15	–	4	7	0	15	–	–	11½
45	16	6	3	200	72	10	–	2	16	–	4	7¾	0	16	–	1	–¼
46	16	13	6	300	108	15	–	2	17	–	4	8½	0	17	–	1	1
47	17	–	9	400	145	–	–	2	18	–	4	9¼	0	18	–	1	1¾
48	17	8	–	500	181	5	–	2	19	–	4	10¼	0	19	–	1	2¾
49	17	15	3	600	217	10	–	2	20	–	4	11	0	20	–	1	3½
50	18	2	6	700	253	15	–	2	21	–	4	11¾	0	21	–	1	4¼
51	18	9	9	800	290	–	–	2	22	–	5	–½	0	22	–	1	5
52	18	17	–	900	326	5	–	2	23	–	5	1¼	0	23	–	1	5¾
53	19	4	3	1000	362	10	–	2	24	–	5	2	0	24	–	1	6½
54	19	11	6	2000	725	–	–	2	25	–	5	2¾	0	25	–	1	7¼
55	19	18	9	3000	1087	10	–	2	26	–	5	3½	0	26	–	1	8
56	20	6	–	4000	1450	–	–	2	27	–	5	4¼	0	27	–	1	8¾

£7. 10s. per Ton. **7s. 6d. per Cwt.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	7	6	57	21	7	6	1	-	-	1	10½	3	-	-	5	7½
2	-	15	-	58	21	15	-	1	1	-	1	11¼	3	1	-	5	8¼
3	1	2	6	59	22	2	6	1	2	-	2	-	3	2	-	5	9
4	1	10	-	60	22	10	-	1	3	-	2	-¾	3	3	-	5	9¾
5	1	17	6	61	22	17	6	1	4	-	2	1½	3	4	-	5	10½
6	2	5	-	62	23	5	-	1	5	-	2	2½	3	5	-	5	11½
7	2	12	6	63	23	12	6	1	6	-	2	3¼	3	6	-	6	-¼
8	3	-	-	64	24	-	-	1	7	-	2	4	3	7	-	6	1
9	3	7	6	65	24	7	6	1	8	-	2	4¾	3	8	-	6	1¾
10	3	15	-	66	24	15	-	1	9	-	2	5½	3	9	-	6	2½
11	4	2	6	67	25	2	6	1	10	-	2	6½	3	10	-	6	3½
12	4	10	-	68	25	10	-	1	11	-	2	7¼	3	11	-	6	4¼
13	4	17	6	69	25	17	6	1	12	-	2	8	3	12	-	6	5
14	5	5	-	70	26	5	-	1	13	-	2	8¾	3	13	-	6	5¾
15	5	12	6	71	26	12	6	1	14	-	2	9¾	3	14	-	6	6¾
16	6	-	-	72	27	-	-	1	15	-	2	10½	3	15	-	6	7½
17	6	7	6	73	27	7	6	1	16	-	2	11¼	3	16	-	6	8¼
18	6	15	-	74	27	15	-	1	17	-	3	-	3	17	-	6	9
19	7	2	6	75	28	2	6	1	18	-	3	-¾	3	18	-	6	9¾
20	7	10	-	76	28	10	-	1	19	-	3	1¾	3	19	-	6	10¾
21	7	17	6	77	28	17	6	1	20	-	3	2½	3	20	-	6	11½
22	8	5	-	78	29	5	-	1	21	-	3	3¼	3	21	-	7	-¼
23	8	12	6	79	29	12	6	1	22	-	3	4	3	22	-	7	1
24	9	-	-	80	30	-	-	1	23	-	3	4¾	3	23	-	7	1¾
25	9	7	6	81	30	7	6	1	24	-	3	5¾	3	24	-	7	2¾
26	9	15	-	82	30	15	-	1	25	-	3	6½	3	25	-	7	3½
27	10	2	6	83	31	2	6	1	26	-	3	7¼	3	26	-	7	4¼
28	10	10	-	84	31	10	-	1	27	-	3	8	3	27	-	7	5
29	10	17	6	85	31	17	6	2	—	-	3	9					
30	11	5	-	86	32	5	-	2	1	-	3	9¾	0	1	-	-	-¾
31	11	12	6	87	32	12	6	2	2	-	3	10½	0	2	-	-	1½
32	12	-	-	88	33	-	-	2	3	-	3	11¼	0	3	-	-	2¼
33	12	7	6	89	33	7	6	2	4	-	4	-	0	4	-	-	3
34	12	15	-	90	33	15	-	2	5	-	4	1	0	5	-	-	4
35	13	2	6	91	34	2	6	2	6	-	4	1¾	0	6	-	-	4¾
36	13	10	-	92	34	10	-	2	7	-	4	2½	0	7	-	-	5½
37	13	17	6	93	34	17	6	2	8	-	4	3¼	0	8	-	-	6¼
38	14	5	-	94	35	5	-	2	9	-	4	4	0	9	-	-	7
39	14	12	6	95	35	12	6	2	10	-	4	5	0	10	-	-	8
40	15	-	-	96	36	-	-	2	11	-	4	5¾	0	11	-	-	8¾
41	15	7	6	97	36	7	6	2	12	-	4	6½	0	12	-	-	9½
42	15	15	-	98	36	15	-	2	13	-	4	7¼	0	13	-	-	10¼
43	16	2	6	99	37	2	6	2	14	-	4	8¼	0	14	-	-	11¼
44	16	10	-	100	37	10	-	2	15	-	4	9	0	15	-	1	-
45	16	17	6	200	75	-	-	2	16	-	4	9¾	0	16	-	1	-¾
46	17	5	-	300	112	10	-	2	17	-	4	10½	0	17	-	1	1½
47	17	12	6	400	150	-	-	2	18	-	4	11¼	0	18	-	1	2¼
48	18	-	-	500	187	10	-	2	19	-	5	-¼	0	19	-	1	3¼
49	18	7	6	600	225	-	-	2	20	-	5	1	0	20	-	1	4
50	18	15	-	700	262	10	-	2	21	-	5	1¾	0	21	-	1	4¾
51	19	2	6	800	300	-	-	2	22	-	5	2½	0	22	-	1	5½
52	19	10	-	900	337	10	-	2	23	-	5	3¼	0	23	-	1	6¼
53	19	17	6	1000	375	-	-	2	24	-	5	4¼	0	24	-	1	7¼
54	20	5	-	2000	750	-	-	2	25	-	5	5	0	25	-	1	8
55	20	12	6	3000	1125	-	-	2	26	-	5	5¾	0	26	-	1	8¾
56	21	-	-	4000	1500	-	-	2	27	-	5	6½	0	27	-	1	9½

7s. 9d. per Cwt.

£7. 15s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	7	9	57	22	1	9	1	–	–	1	11¼	3	–	–	5	9¾
2	–	15	6	58	22	9	6	1	1	–	2	–	3	1	–	5	10½
3	1	3	3	59	22	17	3	1	2	–	2	–¾	3	2	–	5	11¼
4	1	11	–	60	23	5	–	1	3	–	2	1½	3	3	–	6	–
5	1	18	9	61	23	12	9	1	4	–	2	2½	3	4	–	6	1
6	2	6	6	62	24	–	6	1	5	–	2	3¼	3	5	–	6	1¾
7	2	14	3	63	24	8	3	1	6	–	2	4	3	6	–	6	2½
8	3	2	–	64	24	16	–	1	7	–	2	5	3	7	–	6	3½
9	3	9	9	65	25	3	9	1	8	–	2	5¾	3	8	–	6	4¼
10	3	17	6	66	25	11	6	1	9	–	2	6½	3	9	–	6	5
11	4	5	3	67	25	19	3	1	10	–	2	7½	3	10	–	6	6
12	4	13	–	68	26	7	–	1	11	–	2	8¼	3	11	–	6	6¾
13	5	–	9	69	26	14	9	1	12	–	2	9	3	12	–	6	7½
14	5	8	6	70	27	2	6	1	13	–	2	10	3	13	–	6	8½
15	5	16	3	71	27	10	3	1	14	–	2	10¾	3	14	–	6	9¼
16	6	4	–	72	27	18	–	1	15	–	2	11½	3	15	–	6	10
17	6	11	9	73	28	5	9	1	16	–	3	–½	3	16	–	6	11
18	6	19	6	74	28	13	6	1	17	–	3	1¼	3	17	–	6	11¾
19	7	7	3	75	29	1	3	1	18	–	3	2	3	18	–	7	–½
20	7	15	–	76	29	9	–	1	19	–	3	3	3	19	–	7	1½
21	8	2	9	77	29	16	9	1	20	–	3	3¾	3	20	–	7	2¼
22	8	10	6	78	30	4	6	1	21	–	3	4½	3	21	–	7	3
23	8	18	3	79	30	12	3	1	22	–	3	5½	3	22	–	7	4
24	9	6	–	80	31	–	–	1	23	–	3	6¼	3	23	–	7	4¾
25	9	13	9	81	31	7	9	1	24	–	3	7	3	24	–	7	5½
26	10	1	6	82	31	15	6	1	25	–	3	8	3	25	–	7	6½
27	10	9	3	83	32	3	3	1	26	–	3	8¾	3	26	–	7	7¼
28	10	17	–	84	32	11	–	1	27	–	3	9½	3	27	–	7	8
29	11	4	9	85	32	18	9	2	—	–	3	10½					
30	11	12	6	86	33	6	6	2	1	–	3	11¼	0	1	–	–	–¾
31	12	–	3	87	33	14	3	2	2	–	4	–	0	2	–	–	1½
32	12	8	–	88	34	2	–	2	3	–	4	–¾	0	3	–	–	2¼
33	12	15	9	89	34	9	9	2	4	–	4	1¾	0	4	–	–	3¼
34	13	3	6	90	34	17	6	2	5	–	4	2½	0	5	–	–	4
35	13	11	3	91	35	5	3	2	6	–	4	3¼	0	6	–	–	4¾
36	13	19	–	92	35	13	–	2	7	–	4	4¼	0	7	–	–	5¾
37	14	6	9	93	36	–	9	2	8	–	4	5	0	8	–	–	6½
38	14	14	6	94	36	8	6	2	9	–	4	5¾	0	9	–	–	7¼
39	15	2	3	95	36	16	3	2	10	–	4	6¾	0	10	–	–	8¼
40	15	10	–	96	37	4	–	2	11	–	4	7½	0	11	–	–	9
41	15	17	9	97	37	11	9	2	12	–	4	8¼	0	12	–	–	9¾
42	16	5	6	98	37	19	6	2	13	–	4	9¼	0	13	–	–	10¾
43	16	13	3	99	38	7	3	2	14	–	4	10	0	14	–	–	11½
44	17	1	–	100	38	15	–	2	15	–	4	10¾	0	15	–	1	–¼
45	17	8	9	200	77	10	–	2	16	–	4	11¾	0	16	–	1	1¼
46	17	16	6	300	116	5	–	2	17	–	5	–½	0	17	–	1	2
47	18	4	3	400	155	–	–	2	18	–	5	1¼	0	18	–	1	2¾
48	18	12	–	500	193	15	–	2	19	–	5	2¼	0	19	–	1	3¾
49	18	19	9	600	232	10	–	2	20	–	5	3	0	20	–	1	4½
50	19	7	6	700	271	5	–	2	21	–	5	3¾	0	21	–	1	5¼
51	19	15	3	800	310	–	–	2	22	–	5	4¾	0	22	–	1	6¼
52	20	3	–	900	348	15	–	2	23	–	5	5½	0	23	–	1	7
53	20	10	9	1000	387	10	–	2	24	–	5	6¼	0	24	–	1	7¾
54	20	18	6	2000	775	–	–	2	25	–	5	7¼	0	25	–	1	8¾
55	21	6	3	3000	1162	10	–	2	26	–	5	8	0	26	–	1	9½
56	21	14	–	4000	1550	–	–	2	27	–	5	8¾	0	27	–	1	10¼

£8. per Ton.

8s. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	8	–	57	22	16	–	1	–	–	2	–	3	–	–	6	–
2	–	16	–	58	23	4	–	1	1	–	2	–¾	3	1	–	6	–¾
3	1	4	–	59	23	12	–	1	2	–	2	1½	3	2	–	6	1½
4	1	12	–	60	24	–	–	1	3	–	2	2½	3	3	–	6	2½
5	2	–	–	61	24	8	–	1	4	–	2	3¼	3	4	–	6	3¼
6	2	8	–	62	24	16	–	1	5	–	2	4¼	3	5	–	6	4¼
7	2	16	–	63	25	4	–	1	6	–	2	5	3	6	–	6	5
8	3	4	–	64	25	12	–	1	7	–	2	6	3	7	–	6	6
9	3	12	–	65	26	–	–	1	8	–	2	6¾	3	8	–	6	6¾
10	4	–	–	66	26	8	–	1	9	–	2	7½	3	9	–	6	7½
11	4	8	–	67	26	16	–	1	10	–	2	8½	3	10	–	6	8½
12	4	16	–	68	27	4	–	1	11	–	2	9¼	3	11	–	6	9¼
13	5	4	–	69	27	12	–	1	12	–	2	10¼	3	12	–	6	10¼
14	5	12	–	70	28	–	–	1	13	–	2	11	3	13	–	6	11
15	6	–	–	71	28	8	–	1	14	–	3	–	3	14	–	7	–
16	6	8	–	72	28	16	–	1	15	–	3	–¾	3	15	–	7	–¾
17	6	16	–	73	29	4	–	1	16	–	3	1½	3	16	–	7	1½
18	7	4	–	74	29	12	–	1	17	–	3	2½	3	17	–	7	2½
19	7	12	–	75	30	–	–	1	18	–	3	3¼	3	18	–	7	3¼
20	8	–	–	76	30	8	–	1	19	–	3	4¼	3	19	–	7	4¼
21	8	8	–	77	30	16	–	1	20	–	3	5	3	20	–	7	5
22	8	16	–	78	31	4	–	1	21	–	3	6	3	21	–	7	6
23	9	4	–	79	31	12	–	1	22	–	3	6¾	3	22	–	7	6¾
24	9	12	–	80	32	–	–	1	23	–	3	7½	3	23	–	7	7½
25	10	–	–	81	32	8	–	1	24	–	3	8½	3	24	–	7	8½
26	10	8	–	82	32	16	–	1	25	–	3	9¼	3	25	–	7	9¼
27	10	16	–	83	33	4	–	1	26	–	3	10¼	3	26	–	7	10¼
28	11	4	–	84	33	12	–	1	27	–	3	11	3	27	–	7	11
29	11	12	–	85	34	–	–	2	—	–	4	–					
30	12	–	–	86	34	8	–	2	1	–	4	–¾	0	1	–	–	–¾
31	12	8	–	87	34	16	–	2	2	–	4	1½	0	2	–	–	1½
32	12	16	–	88	35	4	–	2	3	–	4	2½	0	3	–	–	2½
33	13	4	–	89	35	12	–	2	4	–	4	3¼	0	4	–	–	3¼
34	13	12	–	90	36	–	–	2	5	–	4	4¼	0	5	–	–	4¼
35	14	–	–	91	36	8	–	2	6	–	4	5	0	6	–	–	5
36	14	8	–	92	36	16	–	2	7	–	4	6	0	7	–	–	6
37	14	16	–	93	37	4	–	2	8	–	4	6¾	0	8	–	–	6¾
38	15	4	–	94	37	12	–	2	9	–	4	7½	0	9	–	–	7½
39	15	12	–	95	38	–	–	2	10	–	4	8½	0	10	–	–	8½
40	16	–	–	96	38	8	–	2	11	–	4	9¼	0	11	–	–	9¼
41	16	8	–	97	38	16	–	2	12	–	4	10¼	0	12	–	–	10¼
42	16	16	–	98	39	4	–	2	13	–	4	11	0	13	–	–	11
43	17	4	–	99	39	12	–	2	14	–	5	–	0	14	–	1	–
44	17	12	–	100	40	–	–	2	15	–	5	–¾	0	15	–	1	–¾
45	18	–	–	200	80	–	–	2	16	–	5	1½	0	16	–	1	1½
46	18	8	–	300	120	–	–	2	17	–	5	2½	0	17	–	1	2½
47	18	16	–	400	160	–	–	2	18	–	5	3¼	0	18	–	1	3¼
48	19	4	–	500	200	–	–	2	19	–	5	4¼	0	19	–	1	4¼
49	19	12	–	600	240	–	–	2	20	–	5	5	0	20	–	1	5
50	20	–	–	700	280	–	–	2	21	–	5	6	0	21	–	1	6
51	20	8	–	800	320	–	–	2	22	–	5	6¾	0	22	–	1	6¾
52	20	16	–	900	360	–	–	2	23	–	5	7½	0	23	–	1	7½
53	21	4	–	1000	400	–	–	2	24	–	5	8½	0	24	–	1	8½
54	21	12	–	2000	800	–	–	2	25	–	5	9¼	0	25	–	1	9¼
55	22	–	–	3000	1200	–	–	2	26	–	5	10¼	0	26	–	1	10¼
56	22	8	–	4000	1600	–	–	2	27	–	5	11	0	27	–	1	11

8*s*. 3*d*. *per Cwt*.

£8. 5s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	8	3	57	23	10	3	1	–	–	2	–¾	3	–	–	6	2¼
2	–	16	6	58	23	18	6	1	1	–	2	1½	3	1	–	6	3
3	1	4	9	59	24	6	9	1	2	–	2	2½	3	2	–	6	4
4	1	13	–	60	24	15	–	1	3	–	2	3¼	3	3	–	6	4¾
5	2	1	3	61	25	3	3	1	4	–	2	4¼	3	4	–	6	5¾
6	2	9	6	62	25	11	6	1	5	–	2	5	3	5	–	6	6½
7	2	17	9	63	25	19	9	1	6	–	2	6	3	6	–	6	7½
8	3	6	–	64	26	8	–	1	7	–	2	6¾	3	7	–	6	8¼
9	3	14	3	65	26	16	3	1	8	–	2	7¾	3	8	–	6	9¼
10	4	2	6	66	27	4	6	1	9	–	2	8½	3	9	–	6	10
11	4	10	9	67	27	12	9	1	10	–	2	9½	3	10	–	6	11
12	4	19	–	68	28	1	–	1	11	–	2	10¼	3	11	–	6	11¾
13	5	7	3	69	28	9	3	1	12	–	2	11¼	3	12	–	7	–¾
14	5	15	6	70	28	17	6	1	13	–	3	–	3	13	–	7	1½
15	6	3	9	71	29	5	9	1	14	–	3	1	3	14	–	7	2½
16	6	12	–	72	29	14	–	1	15	–	3	2	3	15	–	7	3½
17	7	–	3	73	30	2	3	1	16	–	3	2¾	3	16	–	7	4¼
18	7	8	6	74	30	10	6	1	17	–	3	3¾	3	17	–	7	5¼
19	7	16	9	75	30	18	9	1	18	–	3	4½	3	18	–	7	6
20	8	5	–	76	31	7	–	1	19	–	3	5½	3	19	–	7	7
21	8	13	3	77	31	15	3	1	20	–	3	6¼	3	20	–	7	7¾
22	9	1	6	78	32	3	6	1	21	–	3	7¼	3	21	–	7	8¾
23	9	9	9	79	32	11	9	1	22	–	3	8	3	22	–	7	9½
24	9	18	–	80	33	–	–	1	23	–	3	9	3	23	–	7	10½
25	10	6	3	81	33	8	3	1	24	–	3	9¾	3	24	–	7	11¼
26	10	14	6	82	33	16	6	1	25	–	3	10¾	3	25	–	8	–¼
27	11	2	9	83	34	4	9	1	26	–	3	11½	3	26	–	8	1
28	11	11	–	84	34	13	–	1	27	–	4	–½	3	27	–	8	2
29	11	19	3	85	35	1	3	2	—	–	4	1½					
30	12	7	6	86	35	9	6	2	1	–	4	2¼	0	1	–	–	–¾
31	12	15	9	87	35	17	9	2	2	–	4	3¼	0	2	–	–	1¾
32	13	4	–	88	36	6	–	2	3	–	4	4	0	3	–	–	2½
33	13	12	3	89	36	14	3	2	4	–	4	5	0	4	–	–	3½
34	14	–	6	90	37	2	6	2	5	–	4	5¾	0	5	–	–	4¼
35	14	8	9	91	37	10	9	2	6	–	4	6¾	0	6	–	–	5¼
36	14	17	–	92	37	19	–	2	7	–	4	7½	0	7	–	–	6
37	15	5	3	93	38	7	3	2	8	–	4	8½	0	8	–	–	7
38	15	13	6	94	38	15	6	2	9	–	4	9¼	0	9	–	–	7¾
39	16	1	9	95	39	3	9	2	10	–	4	10¼	0	10	–	–	8¾
40	16	10	–	96	39	12	–	2	11	–	4	11	0	11	–	–	9½
41	16	18	3	97	40	–	3	2	12	–	5	–	0	12	–	–	10½
42	17	6	6	98	40	8	6	2	13	–	5	–¾	0	13	–	–	11¼
43	17	14	9	99	40	16	9	2	14	–	5	1¾	0	14	–	1	–¼
44	18	3	–	100	41	5	–	2	15	–	5	2¾	0	15	–	1	1¼
45	18	11	3	200	82	10	–	2	16	–	5	3½	0	16	–	1	2
46	18	19	6	300	123	15	–	2	17	–	5	4½	0	17	–	1	3
47	19	7	9	400	165	–	–	2	18	–	5	5¼	0	18	–	1	3¾
48	19	16	–	500	206	5	–	2	19	–	5	6¼	0	19	–	1	4¾
49	20	4	3	600	247	10	–	2	20	–	5	7	0	20	–	1	5½
50	20	12	6	700	288	15	–	2	21	–	5	8	0	21	–	1	6½
51	21	–	9	800	330	–	–	2	22	–	5	8¾	0	22	–	1	7¼
52	21	9	–	900	371	5	–	2	23	–	5	9¾	0	23	–	1	8¼
53	21	17	3	1000	412	10	–	2	24	–	5	10½	0	24	–	1	9
54	22	5	6	2000	825	–	–	2	25	–	5	11½	0	25	–	1	10
55	22	13	9	3000	1237	10	–	2	26	–	6	–¼	0	26	–	1	10¾
56	23	2	–	4000	1650	–	–	2	27	–	6	1¼	0	27	–	1	11¾

£8. 10s. per Ton.

8s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	8	6	57	24	4	6	1	–	–	2	1½	3	–	–	6	4½
2	–	17	–	58	24	13	–	1	1	–	2	2¼	3	1	–	6	5¼
3	1	5	6	59	25	1	6	1	2	–	2	3¼	3	2	–	6	6¼
4	1	14	–	60	25	10	–	1	3	–	2	4	3	3	–	6	7
5	2	2	6	61	25	18	6	1	4	–	2	5	3	4	–	6	8
6	2	11	–	62	26	7	–	1	5	–	2	6	3	5	–	6	9
7	2	19	6	63	26	15	6	1	6	–	2	6¾	3	6	–	6	9¾
8	3	8	–	64	27	4	–	1	7	–	2	7¾	3	7	–	6	10¾
9	3	16	6	65	27	12	6	1	8	–	2	8¾	3	8	–	6	11¾
10	4	5	–	66	28	1	–	1	9	–	2	9½	3	9	–	7	–½
11	4	13	6	67	28	9	6	1	10	–	2	10½	3	10	–	7	1½
12	5	2	–	68	28	18	–	1	11	–	2	11½	3	11	–	7	2½
13	5	10	6	69	29	6	6	1	12	–	3	–¼	3	12	–	7	3¼
14	5	19	–	70	29	15	–	1	13	–	3	1¼	3	13	–	7	4¼
15	6	7	6	71	30	3	6	1	14	–	3	2¼	3	14	–	7	5¼
16	6	16	–	72	30	12	–	1	15	–	3	3	3	15	–	7	6
17	7	4	6	73	31	–	6	1	16	–	3	4	3	16	–	7	7
18	7	13	–	74	31	9	–	1	17	–	3	4¾	3	17	–	7	7¾
19	8	1	6	75	31	17	6	1	18	–	3	5¾	3	18	–	7	8¾
20	8	10	–	76	32	6	–	1	19	–	3	6¾	3	19	–	7	9¾
21	8	18	6	77	32	14	6	1	20	–	3	7½	3	20	–	7	10½
22	9	7	–	78	33	3	–	1	21	–	3	8½	3	21	–	7	11½
23	9	15	6	79	33	11	6	1	22	–	3	9½	3	22	–	8	–½
24	10	4	–	80	34	–	–	1	23	–	3	10¼	3	23	–	8	1¼
25	10	12	6	81	34	8	6	1	24	–	3	11¼	3	24	–	8	2¼
26	11	1	–	82	34	17	–	1	25	–	4	–¼	3	25	–	8	3¼
27	11	9	6	83	35	5	6	1	26	–	4	1	3	26	–	8	4
28	11	18	–	84	35	14	–	1	27	–	4	2	3	27	–	8	5
29	12	6	6	85	36	2	6	2	—	–	4	3					
30	12	15	–	86	36	11	–	2	1	–	4	3¾	0	1	–	–	–¾
31	13	3	6	87	36	19	6	2	2	–	4	4¾	0	2	–	–	1¾
32	13	12	–	88	37	8	–	2	3	–	4	5½	0	3	–	–	2½
33	14	–	6	89	37	16	6	2	4	–	4	6½	0	4	–	–	3½
34	14	9	–	90	38	5	–	2	5	–	4	7½	0	5	–	–	4½
35	14	17	6	91	38	13	6	2	6	–	4	8¼	0	6	–	–	5¼
36	15	6	–	92	39	2	–	2	7	–	4	9¼	0	7	–	–	6¼
37	15	14	6	93	39	10	6	2	8	–	4	10¼	0	8	–	–	7¼
38	16	3	–	94	39	19	–	2	9	–	4	11	0	9	–	–	8
39	16	11	6	95	40	7	6	2	10	–	5	–	0	10	–	–	9
40	17	–	–	96	40	16	–	2	11	–	5	1	0	11	–	–	10
41	17	8	6	97	41	4	6	2	12	–	5	1¾	0	12	–	–	10¾
42	17	17	–	98	41	13	–	2	13	–	5	2¾	0	13	–	–	11¾
43	18	5	6	99	42	1	6	2	14	–	5	3¾	0	14	–	1	–¾
44	18	14	–	100	42	10	–	2	15	–	5	4½	0	15	–	1	1½
45	19	2	6	200	85	–	–	2	16	–	5	5½	0	16	–	1	2½
46	19	11	–	300	127	10	–	2	17	–	5	6¼	0	17	–	1	3¼
47	19	19	6	400	170	–	–	2	18	–	5	7¼	0	18	–	1	4¼
48	20	8	–	500	212	10	–	2	19	–	5	8¼	0	19	–	1	5¼
49	20	16	6	600	255	–	–	2	20	–	5	9	0	20	–	1	6
50	21	5	–	700	297	10	–	2	21	–	5	10	0	21	–	1	7
51	21	13	6	800	340	–	–	2	22	–	5	11	0	22	–	1	8
52	22	2	–	900	382	10	–	2	23	–	5	11¾	0	23	–	1	8¾
53	22	10	6	1000	425	–	–	2	24	–	6	–¾	0	24	–	1	9¾
54	22	19	–	2000	850	–	–	2	25	–	6	1¾	0	25	–	1	10¾
55	23	7	6	3000	1275	–	–	2	26	–	6	2½	0	26	–	1	11½
56	23	16	–	4000	1700	–	–	2	27	–	6	3½	0	27	–	2	–½

8s. 9d. per Cwt. **£8. 15s.** ***per Ton.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	8	9	57	24	18	9	1	-	-	2	2¼	3	-	-	6	6¾
2	-	17	6	58	25	7	6	1	1	-	2	3	3	1	-	6	7½
3	1	6	3	59	25	16	3	1	2	-	2	4	3	2	-	6	8½
4	1	15	-	60	26	5	-	1	3	-	2	5	3	3	-	6	9½
5	2	3	9	61	26	13	9	1	4	-	2	6	3	4	-	6	10½
6	2	12	6	62	27	2	6	1	5	-	2	6¾	3	5	-	6	11¼
7	3	1	3	63	27	11	3	1	6	-	2	7¾	3	6	-	7	-¼
8	3	10	-	64	28	-	-	1	7	-	2	8¾	3	7	-	7	1¼
9	3	18	9	65	28	8	9	1	8	-	2	9¾	3	8	-	7	2¼
10	4	7	6	66	28	17	6	1	9	-	2	10½	3	9	-	7	3
11	4	16	3	67	29	6	3	1	10	-	2	11½	3	10	-	7	4
12	5	5	-	68	29	15	-	1	11	-	3	-½	3	11	-	7	5
13	5	13	9	69	30	3	9	1	12	-	3	1½	3	12	-	7	6
14	6	2	6	70	30	12	6	1	13	-	3	2¼	3	13	-	7	6¾
15	6	11	3	71	31	1	3	1	14	-	3	3¼	3	14	-	7	7¾
16	7	-	-	72	31	10	-	1	15	-	3	4¼	3	15	-	7	8¾
17	7	8	9	73	31	18	9	1	16	-	3	5¼	3	16	-	7	9¾
18	7	17	6	74	32	7	6	1	17	-	3	6	3	17	-	7	10½
19	8	6	3	75	32	16	3	1	18	-	3	7	3	18	-	7	11½
20	8	15	-	76	33	5	-	1	19	-	3	8	3	19	-	8	-½
21	9	3	9	77	33	13	9	1	20	-	3	9	3	20	-	8	1½
22	9	12	6	78	34	2	6	1	21	-	3	9¾	3	21	-	8	2¼
23	10	1	3	79	34	11	3	1	22	-	3	10¾	3	22	-	8	3¼
24	10	10	-	80	35	-	-	1	23	-	3	11¾	3	23	-	8	4¼
25	10	18	9	81	35	8	9	1	24	-	4	-¾	3	24	-	8	5¼
26	11	7	6	82	35	17	6	1	25	-	4	1½	3	25	-	8	6
27	11	16	3	83	36	6	3	1	26	-	4	2½	3	26	-	8	7
28	12	5	-	84	36	15	-	1	27	-	4	3½	3	27	-	8	8
29	12	13	9	85	37	3	9	2	—	-	4	4½					
30	13	2	6	86	37	12	6	2	1	-	4	5¼	0	1	-	-	-¾
31	13	11	3	87	38	1	3	2	2	-	4	6¼	0	2	-	-	1¾
32	14	-	-	88	38	10	-	2	3	-	4	7¼	0	3	-	-	2¾
33	14	8	9	89	38	18	9	2	4	-	4	8¼	0	4	-	-	3¾
34	14	17	6	90	39	7	6	2	5	-	4	9	0	5	-	-	4½
35	15	6	3	91	39	16	3	2	6	-	4	10	0	6	-	-	5½
36	15	15	-	92	40	5	-	2	7	-	4	11	0	7	-	-	6½
37	16	3	9	93	40	13	9	2	8	-	5	-	0	8	-	-	7½
38	16	12	6	94	41	2	6	2	9	-	5	-¾	0	9	-	-	8¼
39	17	1	3	95	41	11	3	2	10	-	5	1¾	0	10	-	-	9¼
40	17	10	-	96	42	-	-	2	11	-	5	2¾	0	11	-	-	10¼
41	17	18	9	97	42	8	9	2	12	-	5	3¾	0	12	-	-	11¼
42	18	7	6	98	42	17	6	2	13	-	5	4½	0	13	-	1	-
43	18	16	3	99	43	6	3	2	14	-	5	5½	0	14	-	1	1
44	19	5	-	100	43	15	-	2	15	-	5	6½	0	15	-	1	2
45	19	13	9	200	87	10	-	2	16	-	5	7½	0	16	-	1	3
46	20	2	6	300	131	5	-	2	17	-	5	8¼	0	17	-	1	3¾
47	20	11	3	400	175	-	-	2	18	-	5	9¼	0	18	-	1	4¾
48	21	-	-	500	218	15	-	2	19	-	5	10¼	0	19	-	1	5¾
49	21	8	9	600	262	10	-	2	20	-	5	11¼	0	20	-	1	6¾
50	21	17	6	700	306	5	-	2	21	-	6	-	0	21	-	1	7½
51	22	6	3	800	350	-	-	2	22	-	6	1	0	22	-	1	8½
52	22	15	-	900	393	15	-	2	23	-	6	2	0	23	-	1	9½
53	23	3	9	1000	437	10	-	2	24	-	6	3	0	24	-	1	10½
54	23	12	6	2000	875	-	-	2	25	-	6	3¾	0	25	-	1	11¼
55	24	1	3	3000	1312	10	-	2	26	-	6	4¾	0	26	-	2	-¼
56	24	10	-	4000	1750	-	-	2	27	-	6	5¾	0	27	-	2	1¼

£9. per Ton.

9*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	9	–	57	25	13	–	1	–	–	2	3	3	–	–	6	9
2	–	18	–	58	26	2	–	1	1	–	2	3¾	3	1	–	6	9¾
3	1	7	–	59	26	11	–	1	2	–	2	4¾	3	2	–	6	10¾
4	1	16	–	60	27	–	–	1	3	–	2	5¾	3	3	–	6	11¾
5	2	5	–	61	27	9	–	1	4	–	2	6¾	3	4	–	7	–¾
6	2	14	–	62	27	18	–	1	5	–	2	7¾	3	5	–	7	1¾
7	3	3	–	63	28	7	–	1	6	–	2	8¾	3	6	–	7	2¾
8	3	12	–	64	28	16	–	1	7	–	2	9¾	3	7	–	7	3¾
9	4	1	–	65	29	5	–	1	8	–	2	10½	3	8	–	7	4½
10	4	10	–	66	29	14	–	1	9	–	2	11½	3	9	–	7	5½
11	4	19	–	67	30	3	–	1	10	–	3	–½	3	10	–	7	6½
12	5	8	–	68	30	12	–	1	11	–	3	1½	3	11	–	7	7½
13	5	17	–	69	31	1	–	1	12	–	3	2½	3	12	–	7	8½
14	6	6	–	70	31	10	–	1	13	–	3	3½	3	13	–	7	9½
15	6	15	–	71	31	19	–	1	14	–	3	4½	3	14	–	7	10½
16	7	4	–	72	32	8	–	1	15	–	3	5¼	3	15	–	7	11¼
17	7	13	–	73	32	17	–	1	16	–	3	6¼	3	16	–	8	–¼
18	8	2	–	74	33	6	–	1	17	–	3	7¼	3	17	–	8	1¼
19	8	11	–	75	33	15	–	1	18	–	3	8¼	3	18	–	8	2¼
20	9	–	–	76	34	4	–	1	19	–	3	9¼	3	19	–	8	3¼
21	9	9	–	77	34	13	–	1	20	–	3	10¼	3	20	–	8	4¼
22	9	18	–	78	35	2	–	1	21	–	3	11¼	3	21	–	8	5¼
23	10	7	–	79	35	11	–	1	22	–	4	–	3	22	–	8	6
24	10	16	–	80	36	–	–	1	23	–	4	1	3	23	–	8	7
25	11	5	–	81	36	9	–	1	24	–	4	2	3	24	–	8	8
26	11	14	–	82	36	18	–	1	25	–	4	3	3	25	–	8	9
27	12	3	–	83	37	7	–	1	26	–	4	4	3	26	–	8	10
28	12	12	–	84	37	16	–	1	27	–	4	5	3	27	–	8	11
29	13	1	–	85	38	5	–	2	—	–	4	6					
30	13	10	–	86	38	14	–	2	1	–	4	6¾	0	1	–	–	–¾
31	13	19	–	87	39	3	–	2	2	–	4	7¾	0	2	–	–	1¾
32	14	8	–	88	39	12	–	2	3	–	4	8¾	0	3	–	–	2¾
33	14	17	–	89	40	1	–	2	4	–	4	9¾	0	4	–	–	3¾
34	15	6	–	90	40	10	–	2	5	–	4	10¾	0	5	–	–	4¾
35	15	15	–	91	40	19	–	2	6	–	4	11¾	0	6	–	–	5¾
36	16	4	–	92	41	8	–	2	7	–	5	–¾	0	7	–	–	6¾
37	16	13	–	93	41	17	–	2	8	–	5	1½	0	8	–	–	7½
38	17	2	–	94	42	6	–	2	9	–	5	2½	0	9	–	–	8½
39	17	11	–	95	42	15	–	2	10	–	5	3½	0	10	–	–	9½
40	18	–	–	96	43	4	–	2	11	–	5	4½	0	11	–	–	10½
41	18	9	–	97	43	13	–	2	12	–	5	5½	0	12	–	–	11½
42	18	18	–	98	44	2	–	2	13	–	5	6½	0	13	–	1	–½
43	19	7	–	99	44	11	–	2	14	–	5	7½	0	14	–	1	1½
44	19	16	–	100	45	–	–	2	15	–	5	8¼	0	15	–	1	2¼
45	20	5	–	200	90	–	–	2	16	–	5	9¼	0	16	–	1	3¼
46	20	14	–	300	135	–	–	2	17	–	5	10¼	0	17	–	1	4¼
47	21	3	–	400	180	–	–	2	18	–	5	11¼	0	18	–	1	5¼
48	21	12	–	500	225	–	–	2	19	–	6	–¼	0	19	–	1	6¼
49	22	1	–	600	270	–	–	2	20	–	6	1¼	0	20	–	1	7¼
50	22	10	–	700	315	–	–	2	21	–	6	2¼	0	21	–	1	8¼
51	22	19	–	800	360	–	–	2	22	–	6	3	0	22	–	1	9
52	23	8	–	900	405	–	–	2	23	–	6	4	0	23	–	1	10
53	23	17	–	1000	450	–	–	2	24	–	6	5	0	24	–	1	11
54	24	6	–	2000	900	–	–	2	25	–	6	6	0	25	–	2	–
55	24	15	–	3000	1350	–	–	2	26	–	6	7	0	26	–	2	1
56	25	4	–	4000	1800	–	–	2	27	–	6	8	0	27	–	2	2

9*s*. 3*d*. *per Cwt*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	9	3	57	26	7	3	1	–	–	2	3¾	3	–	–	6	11¼
2	–	18	6	58	26	16	6	1	1	–	2	4½	3	1	–	7	–
3	1	7	9	59	27	5	9	1	2	–	2	5½	3	2	–	7	1
4	1	17	–	60	27	15	–	1	3	–	2	6½	3	3	–	7	2
5	2	6	3	61	28	4	3	1	4	–	2	7½	3	4	–	7	3
6	2	15	6	62	28	13	6	1	5	–	2	8½	3	5	–	7	4
7	3	4	9	63	29	2	9	1	6	–	2	9½	3	6	–	7	5
8	3	14	–	64	29	12	–	1	7	–	2	10½	3	7	–	7	6
9	4	3	3	65	30	1	3	1	8	–	2	11½	3	8	–	7	7
10	4	12	6	66	30	10	6	1	9	–	3	–½	3	9	–	7	8
11	5	1	9	67	30	19	9	1	10	–	3	1½	3	10	–	7	9
12	5	11	–	68	31	9	–	1	11	–	3	2½	3	11	–	7	10
13	6	–	3	69	31	18	3	1	12	–	3	3½	3	12	–	7	11
14	6	9	6	70	32	7	6	1	13	–	3	4½	3	13	–	8	–
15	6	18	9	71	32	16	9	1	14	–	3	5½	3	14	–	8	1
16	7	8	–	72	33	6	–	1	15	–	3	6½	3	15	–	8	2
17	7	17	3	73	33	15	3	1	16	–	3	7½	3	16	–	8	3
18	8	6	6	74	34	4	6	1	17	–	3	8½	3	17	–	8	4
19	8	15	9	75	34	13	9	1	18	–	3	9½	3	18	–	8	5
20	9	5	–	76	35	3	–	1	19	–	3	10½	3	19	–	8	6
21	9	14	3	77	35	12	3	1	20	–	3	11½	3	20	–	8	7
22	10	3	6	78	36	1	6	1	21	–	4	–½	3	21	–	8	8
23	10	12	9	79	36	10	9	1	22	–	4	1½	3	22	–	8	9
24	11	2	–	80	37	–	–	1	23	–	4	2½	3	23	–	8	10
25	11	11	3	81	37	9	3	1	24	–	4	3½	3	24	–	8	11
26	12	–	6	82	37	18	6	1	25	–	4	4½	3	25	–	9	–
27	12	9	9	83	38	7	9	1	26	–	4	5½	3	26	–	9	1
28	12	19	–	84	38	17	–	1	27	–	4	6½	3	27	–	9	2
29	13	8	3	85	39	6	3	2	—	–	4	7½					
30	13	17	6	86	39	15	6	2	1	–	4	8¼	0	1	–	–	–¾
31	14	6	9	87	40	4	9	2	2	–	4	9¼	0	2	–	–	1¾
32	14	16	–	88	40	14	–	2	3	–	4	10¼	0	3	–	–	2¾
33	15	5	3	89	41	3	3	2	4	–	4	11¼	0	4	–	–	3¾
34	15	14	6	90	41	12	6	2	5	–	5	–¼	0	5	–	–	4¾
35	16	3	9	91	42	1	9	2	6	–	5	1¼	0	6	–	–	5¾
36	16	13	–	92	42	11	–	2	7	–	5	2¼	0	7	–	–	6¾
37	17	2	3	93	43	–	3	2	8	–	5	3¼	0	8	–	–	7¾
38	17	11	6	94	43	9	6	2	9	–	5	4¼	0	9	–	–	8¾
39	18	–	9	95	43	18	9	2	10	–	5	5¼	0	10	–	–	9¾
40	18	10	–	96	44	8	–	2	11	–	5	6¼	0	11	–	–	10¾
41	18	19	3	97	44	17	3	2	12	–	5	7¼	0	12	–	–	11¾
42	19	8	6	98	45	6	6	2	13	–	5	8¼	0	13	–	1	–¾
43	19	17	9	99	45	15	9	2	14	–	5	9¼	0	14	–	1	1¾
44	20	7	–	100	46	5	–	2	15	–	5	10¼	0	15	–	1	2¾
45	20	16	3	200	92	10	–	2	16	–	5	11¼	0	16	–	1	3¾
46	21	5	6	300	138	15	–	2	17	–	6	–¼	0	17	–	1	4¾
47	21	14	9	400	185	–	–	2	18	–	6	1¼	0	18	–	1	5¾
48	22	4	–	500	231	5	–	2	19	–	6	2¼	0	19	–	1	6¾
49	22	13	3	600	277	10	–	2	20	–	6	3¼	0	20	–	1	7¾
50	23	2	6	700	323	15	–	2	21	–	6	4¼	0	21	–	1	8¾
51	23	11	9	800	370	–	–	2	22	–	6	5¼	0	22	–	1	9¾
52	24	1	–	900	416	5	–	2	23	–	6	6¼	0	23	–	1	10¾
53	24	10	3	1000	462	10	–	2	24	–	6	7¼	0	24	–	1	11¾
54	24	19	6	2000	925	–	–	2	25	–	6	8¼	0	25	–	2	–¾
55	25	8	9	3000	1387	10	–	2	26	–	6	9¼	0	26	–	2	1¾
56	25	18	–	4000	1850	–	–	2	27	–	6	10¼	0	27	–	2	2¾

£9. 6s. 8d. per Ton. 1d. per lb. 9s. 4d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	9	4	57	26	12	–	1	–	–	2	4	3	–	–	7	–
2	–	18	8	58	27	1	4	1	1	–	2	5	3	1	–	7	1
3	1	8	–	59	27	10	8	1	2	–	2	6	3	2	–	7	2
4	1	17	4	60	28	–	–	1	3	–	2	7	3	3	–	7	3
5	2	6	8	61	28	9	4	1	4	–	2	8	3	4	–	7	4
6	2	16	–	62	28	18	8	1	5	–	2	9	3	5	–	7	5
7	3	5	4	63	29	8	–	1	6	–	2	10	3	6	–	7	6
8	3	14	8	64	29	17	4	1	7	–	2	11	3	7	–	7	7
9	4	4	–	65	30	6	8	1	8	–	3	–	3	8	–	7	8
10	4	13	4	66	30	16	–	1	9	–	3	1	3	9	–	7	9
11	5	2	8	67	31	5	4	1	10	–	3	2	3	10	–	7	10
12	5	12	–	68	31	14	8	1	11	–	3	3	3	11	–	7	11
13	6	1	4	69	32	4	–	1	12	–	3	4	3	12	–	8	–
14	6	10	8	70	32	13	4	1	13	–	3	5	3	13	–	8	1
15	7	–	–	71	33	2	8	1	14	–	3	6	3	14	–	8	2
16	7	9	4	72	33	12	–	1	15	–	3	7	3	15	–	8	3
17	7	18	8	73	34	1	4	1	16	–	3	8	3	16	–	8	4
18	8	8	–	74	34	10	8	1	17	–	3	9	3	17	–	8	5
19	8	17	4	75	35	–	–	1	18	–	3	10	3	18	–	8	6
20	9	6	8	76	35	9	4	1	19	–	3	11	3	19	–	8	7
21	9	16	–	77	35	18	8	1	20	–	4	–	3	20	–	8	8
22	10	5	4	78	36	8	–	1	21	–	4	1	3	21	–	8	9
23	10	14	8	79	36	17	4	1	22	–	4	2	3	22	–	8	10
24	11	4	–	80	37	6	8	1	23	–	4	3	3	23	–	8	11
25	11	13	4	81	37	16	–	1	24	–	4	4	3	24	–	9	–
26	12	2	8	82	38	5	4	1	25	–	4	5	3	25	–	9	1
27	12	12	–	83	38	14	8	1	26	–	4	6	3	26	–	9	2
28	13	1	4	84	39	4	–	1	27	–	4	7	3	27	–	9	3
29	13	10	8	85	39	13	4	2	—	–	4	8					
30	14	–	–	86	40	2	8	2	1	–	4	9	0	1	–	–	1
31	14	9	4	87	40	12	–	2	2	–	4	10	0	2	–	–	2
32	14	18	8	88	41	1	4	2	3	–	4	11	0	3	–	–	3
33	15	8	–	89	41	10	8	2	4	–	5	–	0	4	–	–	4
34	15	17	4	90	42	–	–	2	5	–	5	1	0	5	–	–	5
35	16	6	8	91	42	9	4	2	6	–	5	2	0	6	–	–	6
36	16	16	–	92	42	18	8	2	7	–	5	3	0	7	–	–	7
37	17	5	4	93	43	8	–	2	8	–	5	4	0	8	–	–	8
38	17	14	8	94	43	17	4	2	9	–	5	5	0	9	–	–	9
39	18	4	–	95	44	6	8	2	10	–	5	6	0	10	–	–	10
40	18	13	4	96	44	16	–	2	11	–	5	7	0	11	–	–	11
41	19	2	8	97	45	5	4	2	12	–	5	8	0	12	–	1	–
42	19	12	–	98	45	14	8	2	13	–	5	9	0	13	–	1	1
43	20	1	4	99	46	4	–	2	14	–	5	10	0	14	–	1	2
44	20	10	8	100	46	13	4	2	15	–	5	11	0	15	–	1	3
45	21	–	–	200	93	6	8	2	16	–	6	–	0	16	–	1	4
46	21	9	4	300	140	–	–	2	17	–	6	1	0	17	–	1	5
47	21	18	8	400	186	13	4	2	18	–	6	2	0	18	–	1	6
48	22	8	–	500	233	6	8	2	19	–	6	3	0	19	–	1	7
49	22	17	4	600	280	–	–	2	20	–	6	4	0	20	–	1	8
50	23	6	8	700	326	13	4	2	21	–	6	5	0	21	–	1	9
51	23	16	–	800	373	6	8	2	22	–	6	6	0	22	–	1	10
52	24	5	4	900	420	–	–	2	23	–	6	7	0	23	–	1	11
53	24	14	8	1000	466	13	4	2	24	–	6	8	0	24	–	2	–
54	25	4	–	2000	933	6	8	2	25	–	6	9	0	25	–	2	1
55	25	13	4	3000	1400	–	–	2	26	–	6	10	0	26	–	2	2
56	26	2	8	4000	1866	13	4	2	27	–	6	11	0	27	–	2	3

9*s*. 6*d*. *per Cwt*.

£9. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	9	6	57	27	1	6	1	–	–	2	4½	3	–	–	7	1½
2	–	19	–	58	27	11	–	1	1	–	2	5½	3	1	–	7	2½
3	1	8	6	59	28	–	6	1	2	–	2	6½	3	2	–	7	3½
4	1	18	–	60	28	10	–	1	3	–	2	7½	3	3	–	7	4½
5	2	7	6	61	28	19	6	1	4	–	2	8½	3	4	–	7	5½
6	2	17	–	62	29	9	–	1	5	–	2	9½	3	5	–	7	6½
7	3	6	6	63	29	18	6	1	6	–	2	10½	3	6	–	7	7½
8	3	16	–	64	30	8	–	1	7	–	2	11½	3	7	–	7	8½
9	4	5	6	65	30	17	6	1	8	–	3	–½	3	8	–	7	9½
10	4	15	–	66	31	7	–	1	9	–	3	1½	3	9	–	7	10½
11	5	4	6	67	31	16	6	1	10	–	3	2½	3	10	–	7	11½
12	5	14	–	68	32	6	–	1	11	–	3	3½	3	11	–	8	–½
13	6	3	6	69	32	15	6	1	12	–	3	4½	3	12	–	8	1½
14	6	13	–	70	33	5	–	1	13	–	3	5½	3	13	–	8	2½
15	7	2	6	71	33	14	6	1	14	–	3	6¾	3	14	–	8	3¾
16	7	12	–	72	34	4	–	1	15	–	3	7¾	3	15	–	8	4¾
17	8	1	6	73	34	13	6	1	16	–	3	8¾	3	16	–	8	5¾
18	8	11	–	74	35	3	–	1	17	–	3	9¾	3	17	–	8	6¾
19	9	–	6	75	35	12	6	1	18	–	3	10¾	3	18	–	8	7¾
20	9	10	–	76	36	2	–	1	19	–	3	11¾	3	19	–	8	8¾
21	9	19	6	77	36	11	6	1	20	–	4	–¾	3	20	–	8	9¾
22	10	9	–	78	37	1	–	1	21	–	4	1¾	3	21	–	8	10¾
23	10	18	6	79	37	10	6	1	22	–	4	2¾	3	22	–	8	11¾
24	11	8	–	80	38	–	–	1	23	–	4	3¾	3	23	–	9	–¾
25	11	17	6	81	38	9	6	1	24	–	4	4¾	3	24	–	9	1¾
26	12	7	–	82	38	19	–	1	25	–	4	5¾	3	25	–	9	2¾
27	12	16	6	83	39	8	6	1	26	–	4	6¾	3	26	–	9	3¾
28	13	6	–	84	39	18	–	1	27	–	4	7¾	3	27	–	9	4¾
29	13	15	6	85	40	7	6	2	—	–	4	9					
30	14	5	–	86	40	17	–	2	1	–	4	10	0	1	–	–	1
31	14	14	6	87	41	6	6	2	2	–	4	11	0	2	–	–	2
32	15	4	–	88	41	16	–	2	3	–	5	–	0	3	–	–	3
33	15	13	6	89	42	5	6	2	4	–	5	1	0	4	–	–	4
34	16	3	–	90	42	15	–	2	5	–	5	2	0	5	–	–	5
35	16	12	6	91	43	4	6	2	6	–	5	3	0	6	–	–	6
36	17	2	–	92	43	14	–	2	7	–	5	4	0	7	–	–	7
37	17	11	6	93	44	3	6	2	8	–	5	5	0	8	–	–	8
38	18	1	–	94	44	13	–	2	9	–	5	6	0	9	–	–	9
39	18	10	6	95	45	2	6	2	10	–	5	7	0	10	–	–	10
40	19	–	–	96	45	12	–	2	11	–	5	8	0	11	–	–	11
41	19	9	6	97	46	1	6	2	12	–	5	9	0	12	–	1	–
42	19	19	–	98	46	11	–	2	13	–	5	10	0	13	–	1	1
43	20	8	6	99	47	–	6	2	14	–	5	11¼	0	14	–	1	2¼
44	20	18	–	100	47	10	–	2	15	–	6	–¼	0	15	–	1	3¼
45	21	7	6	200	95	–	–	2	16	–	6	1¼	0	16	–	1	4¼
46	21	17	–	300	142	10	–	2	17	–	6	2¼	0	17	–	1	5¼
47	22	6	6	400	190	–	–	2	18	–	6	3¼	0	18	–	1	6¼
48	22	16	–	500	237	10	–	2	19	–	6	4¼	0	19	–	1	7¼
49	23	5	6	600	285	–	–	2	20	–	6	5¼	0	20	–	1	8¼
50	23	15	–	700	332	10	–	2	21	–	6	6¼	0	21	–	1	9¼
51	24	4	6	800	380	–	–	2	22	–	6	7¼	0	22	–	1	10¼
52	24	14	–	900	427	10	–	2	23	–	6	8¼	0	23	–	1	11¼
53	25	3	6	1000	475	–	–	2	24	–	6	9¼	0	24	–	2	–¼
54	25	13	–	2000	950	–	–	2	25	–	6	10¼	0	25	–	2	1¼
55	26	2	6	3000	1425	–	–	2	26	–	6	11¼	0	26	–	2	2¼
56	26	12	–	4000	1900	–	–	2	27	–	7	–¼	0	27	–	2	3¼

9s. 9d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	9	9	57	27	15	9	1	–	–	2	5¼	3	–	–	7	3¾
2	–	19	6	58	28	5	6	1	1	–	2	6¼	3	1	–	7	4¾
3	1	9	3	59	28	15	3	1	2	–	2	7¼	3	2	–	7	5¾
4	1	19	–	60	29	5	–	1	3	–	2	8¼	3	3	–	7	6¾
5	2	8	9	61	29	14	9	1	4	–	2	9¼	3	4	–	7	7¾
6	2	18	6	62	30	4	6	1	5	–	2	10¼	3	5	–	7	8¾
7	3	8	3	63	30	14	3	1	6	–	2	11½	3	6	–	7	10
8	3	18	–	64	31	4	–	1	7	–	3	–½	3	7	–	7	11
9	4	7	9	65	31	13	9	1	8	–	3	1½	3	8	–	8	–
10	4	17	6	66	32	3	6	1	9	–	3	2½	3	9	–	8	1
11	5	7	3	67	32	13	3	1	10	–	3	3½	3	10	–	8	2
12	5	17	–	68	33	3	–	1	11	–	3	4½	3	11	–	8	3
13	6	6	9	69	33	12	9	1	12	–	3	5¾	3	12	–	8	4¼
14	6	16	6	70	34	2	6	1	13	–	3	6¾	3	13	–	8	5¼
15	7	6	3	71	34	12	3	1	14	–	3	7¾	3	14	–	8	6¼
16	7	16	–	72	35	2	–	1	15	–	3	8¾	3	15	–	8	7¼
17	8	5	9	73	35	11	9	1	16	–	3	9¾	3	16	–	8	8¼
18	8	15	6	74	36	1	6	1	17	–	3	11	3	17	–	8	9½
19	9	5	3	75	36	11	3	1	18	–	4	–	3	18	–	8	10½
20	9	15	–	76	37	1	–	1	19	–	4	1	3	19	–	8	11½
21	10	4	9	77	37	10	9	1	20	–	4	2	3	20	–	9	–½
22	10	14	6	78	38	–	6	1	21	–	4	3	3	21	–	9	1½
23	11	4	3	79	38	10	3	1	22	–	4	4	3	22	–	9	2½
24	11	14	–	80	39	–	–	1	23	–	4	5¼	3	23	–	9	3¾
25	12	3	9	81	39	9	9	1	24	–	4	6¼	3	24	–	9	4¾
26	12	13	6	82	39	19	6	1	25	–	4	7¼	3	25	–	9	5¾
27	13	3	3	83	40	9	3	1	26	–	4	8¼	3	26	–	9	6¾
28	13	13	–	84	40	19	–	1	27	–	4	9¼	3	27	–	9	7¾
29	14	2	9	85	41	8	9	2	—	–	4	10½					
30	14	12	6	86	41	18	6	2	1	–	4	11½	0	1	–	–	1
31	15	2	3	87	42	8	3	2	2	–	5	–½	0	2	–	–	2
32	15	12	–	88	42	18	–	2	3	–	5	1½	0	3	–	–	3
33	16	1	9	89	43	7	9	2	4	–	5	2½	0	4	–	–	4
34	16	11	6	90	43	17	6	2	5	–	5	3½	0	5	–	–	5
35	17	1	3	91	44	7	3	2	6	–	5	4¾	0	6	–	–	6¼
36	17	11	–	92	44	17	–	2	7	–	5	5¾	0	7	–	–	7¼
37	18	–	9	93	45	6	9	2	8	–	5	6¾	0	8	–	–	8¼
38	18	10	6	94	45	16	6	2	9	–	5	7¾	0	9	–	–	9¼
39	19	–	3	95	46	6	3	2	10	–	5	8¾	0	10	–	–	10¼
40	19	10	–	96	46	16	–	2	11	–	5	9¾	0	11	–	–	11¼
41	19	19	9	97	47	5	9	2	12	–	5	11	0	12	–	1	–½
42	20	9	6	98	47	15	6	2	13	–	6	–	0	13	–	1	1½
43	20	19	3	99	48	5	3	2	14	–	6	1	0	14	–	1	2½
44	21	9	–	100	48	15	–	2	15	–	6	2	0	15	–	1	3½
45	21	18	9	200	97	10	–	2	16	–	6	3	0	16	–	1	4½
46	22	8	6	300	146	5	–	2	17	–	6	4¼	0	17	–	1	5¾
47	22	18	3	400	195	–	–	2	18	–	6	5¼	0	18	–	1	6¾
48	23	8	–	500	243	15	–	2	19	–	6	6¼	0	19	–	1	7¾
49	23	17	9	600	292	10	–	2	20	–	6	7¼	0	20	–	1	8¾
50	24	7	6	700	341	5	–	2	21	–	6	8¼	0	21	–	1	9¾
51	24	17	3	800	390	–	–	2	22	–	6	9¼	0	22	–	1	10¾
52	25	7	–	900	438	15	–	2	23	–	6	10½	0	23	–	2	–
53	25	16	9	1000	487	10	–	2	24	–	6	11½	0	24	–	2	1
54	26	6	6	2000	975	–	–	2	25	–	7	–½	0	25	–	2	2
55	26	16	3	3000	1462	10	–	2	26	–	7	1½	0	26	–	2	3
56	27	6	–	4000	1950	–	–	2	27	–	7	2½	0	27	–	2	4

10*s.* *per Cwt.* £10. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	10	–	57	28	10	–	1	–	–	2	6	3	–	–	7	6
2	1	–	–	58	29	–	–	1	1	–	2	7	3	1	–	7	7
3	1	10	–	59	29	10	–	1	2	–	2	8	3	2	–	7	8
4	2	–	–	60	30	–	–	1	3	–	2	9	3	3	–	7	9
5	2	10	–	61	30	10	–	1	4	–	2	10¼	3	4	–	7	10¼
6	3	–	–	62	31	–	–	1	5	–	2	11¼	3	5	–	7	11¼
7	3	10	–	63	31	10	–	1	6	–	3	–¼	3	6	–	8	–¼
8	4	–	–	64	32	–	–	1	7	–	3	1½	3	7	–	8	1½
9	4	10	–	65	32	10	–	1	8	–	3	2½	3	8	–	8	2½
10	5	–	–	66	33	–	–	1	9	–	3	3½	3	9	–	8	3½
11	5	10	–	67	33	10	–	1	10	–	3	4½	3	10	–	8	4½
12	6	–	–	68	34	–	–	1	11	–	3	5¾	3	11	–	8	5¾
13	6	10	–	69	34	10	–	1	12	–	3	6¾	3	12	–	8	6¾
14	7	–	–	70	35	–	–	1	13	–	3	7¾	3	13	–	8	7¾
15	7	10	–	71	35	10	–	1	14	–	3	9	3	14	–	8	9
16	8	–	–	72	36	–	–	1	15	–	3	10	3	15	–	8	10
17	8	10	–	73	36	10	–	1	16	–	3	11	3	16	–	8	11
18	9	–	–	74	37	–	–	1	17	–	4	–	3	17	–	9	–
19	9	10	–	75	37	10	–	1	18	–	4	1¼	3	18	–	9	1¼
20	10	–	–	76	38	–	–	1	19	–	4	2¼	3	19	–	9	2¼
21	10	10	–	77	38	10	–	1	20	–	4	3¼	3	20	–	9	3¼
22	11	–	–	78	39	–	–	1	21	–	4	4½	3	21	–	9	4½
23	11	10	–	79	39	10	–	1	22	–	4	5½	3	22	–	9	5½
24	12	–	–	80	40	–	–	1	23	–	4	6½	3	23	–	9	6½
25	12	10	–	81	40	10	–	1	24	–	4	7½	3	24	–	9	7½
26	13	–	–	82	41	–	–	1	25	–	4	8¾	3	25	–	9	8¾
27	13	10	–	83	41	10	–	1	26	–	4	9¾	3	26	–	9	9¾
28	14	–	–	84	42	–	–	1	27	–	4	10¾	3	27	–	9	10¾
29	14	10	–	85	42	10	–	2	—	–	5	–	—	—	—	—	—
30	15	–	–	86	43	–	–	2	1	–	5	1	0	1	–	–	1
31	15	10	–	87	43	10	–	2	2	–	5	2	0	2	–	–	2
32	16	–	–	88	44	–	–	2	3	–	5	3	0	3	–	–	3
33	16	10	–	89	44	10	–	2	4	–	5	4¼	0	4	–	–	4¼
34	17	–	–	90	45	–	–	2	5	–	5	5¼	0	5	–	–	5¼
35	17	10	–	91	45	10	–	2	6	–	5	6¼	0	6	–	–	6¼
36	18	–	–	92	46	–	–	2	7	–	5	7½	0	7	–	–	7½
37	18	10	–	93	46	10	–	2	8	–	5	8½	0	8	–	–	8½
38	19	–	–	94	47	–	–	2	9	–	5	9½	0	9	–	–	9½
39	19	10	–	95	47	10	–	2	10	–	5	10½	0	10	–	–	10½
40	20	–	–	96	48	–	–	2	11	–	5	11¾	0	11	–	–	11¾
41	20	10	–	97	48	10	–	2	12	–	6	–¾	0	12	–	1	–¾
42	21	–	–	98	49	–	–	2	13	–	6	1¾	0	13	–	1	1¾
43	21	10	–	99	49	10	–	2	14	–	6	3	0	14	–	1	3
44	22	–	–	100	50	–	–	2	15	–	6	4	0	15	–	1	4
45	22	10	–	200	100	–	–	2	16	–	6	5	0	16	–	1	5
46	23	–	–	300	150	–	–	2	17	–	6	6	0	17	–	1	6
47	23	10	–	400	200	–	–	2	18	–	6	7¼	0	18	–	1	7¼
48	24	–	–	500	250	–	–	2	19	–	6	8¼	0	19	–	1	8¼
49	24	10	–	600	300	–	–	2	20	–	6	9¼	0	20	–	1	9¼
50	25	–	–	700	350	–	–	2	21	–	6	10½	0	21	–	1	10½
51	25	10	–	800	400	–	–	2	22	–	6	11½	0	22	–	1	11½
52	26	–	–	900	450	–	–	2	23	–	7	–½	0	23	–	2	–½
53	26	10	–	1000	500	–	–	2	24	–	7	1½	0	24	–	2	1½
54	27	–	–	2000	1000	–	–	2	25	–	7	2¾	0	25	–	2	2¾
55	27	10	–	3000	1500	–	–	2	26	–	7	3¾	0	26	–	2	3¾
56	28	–	–	4000	2000	–	–	2	27	–	7	4¾	0	27	–	2	4¾

10s. 3d. per Cwt.

Cwt.	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	10	3	57	29	4	3	1	–	–	2	6¾	3	–	–	7	8¼
2	1	–	6	58	29	14	6	1	1	–	2	7¾	3	1	–	7	9¼
3	1	10	9	59	30	4	9	1	2	–	2	8⅞	3	2	–	7	10⅜
4	2	1	–	60	30	15	–	1	3	–	2	10	3	3	–	7	11½
5	2	11	3	61	31	5	3	1	4	–	2	11	3	4	–	8	–⅝
6	3	1	6	62	31	15	6	1	5	–	3	–	3	5	–	8	1⅝
7	3	11	9	63	32	5	9	1	6	–	3	1¼	3	6	–	8	2¾
8	4	2	–	64	32	16	–	1	7	–	3	2⅜	3	7	–	8	3⅞
9	4	12	3	65	33	6	3	1	8	–	3	3½	3	8	–	8	5
10	5	2	6	66	33	16	6	1	9	–	3	4⅝	3	9	–	8	6
11	5	12	9	67	34	6	9	1	10	–	3	5⅝	3	10	–	8	7
12	6	3	–	68	34	17	–	1	11	–	3	6¾	3	11	–	8	8¼
13	6	13	3	69	35	7	3	1	12	–	3	7⅞	3	12	–	8	9¼
14	7	3	6	70	35	17	6	1	13	–	3	9	3	13	–	8	10½
15	7	13	9	71	36	7	9	1	14	–	3	10	3	14	–	8	11½
16	8	4	–	72	36	18	–	1	15	–	3	11	3	15	–	9	–⅝
17	8	14	3	73	37	8	3	1	16	–	4	–¼	3	16	–	9	1¾
18	9	4	6	74	37	18	6	1	17	–	4	1⅜	3	17	–	9	2⅞
19	9	14	9	75	38	8	9	1	18	–	4	2½	3	18	–	9	4
20	10	5	–	76	38	19	–	1	19	–	4	3½	3	19	–	9	5
21	10	15	3	77	39	9	3	1	20	–	4	4⅝	3	20	–	9	6
22	11	5	6	78	39	19	6	1	21	–	4	5¾	3	21	–	9	7¼
23	11	15	9	79	40	9	9	1	22	–	4	6¾	3	22	–	9	8¼
24	12	6	–	80	41	–	–	1	23	–	4	8	3	23	–	9	9½
25	12	16	3	81	41	10	3	1	24	–	4	9	3	24	–	9	10½
26	13	6	6	82	42	–	6	1	25	–	4	10	3	25	–	9	11⅝
27	13	16	9	83	42	10	9	1	26	–	4	11¼	3	26	–	10	–¾
28	14	7	–	84	43	1	–	1	27	–	5	–⅜	3	27	–	10	1⅞
29	14	17	3	85	43	11	3	2	—	–	5	1½					
30	15	7	6	86	44	1	6	2	1	–	5	2½	0	1	–	–	1
31	15	17	9	87	44	11	9	2	2	–	5	3⅝	0	2	–	–	2
32	16	8	–	88	45	2	–	2	3	–	5	4¾	0	3	–	–	3¼
33	16	18	3	89	45	12	3	2	4	–	5	5¾	0	4	–	–	4¼
34	17	8	6	90	46	2	6	2	5	–	5	6¾	0	5	–	–	5¼
35	17	18	9	91	46	12	9	2	6	–	5	8	0	6	–	–	6½
36	18	9	–	92	47	3	–	2	7	–	5	9	0	7	–	–	7½
37	18	19	3	93	47	13	3	2	8	–	5	10¼	0	8	–	–	8¾
38	19	9	6	94	48	3	6	2	9	–	5	11¼	0	9	–	–	9¾
39	19	19	9	95	48	13	9	2	10	–	6	–¼	0	10	–	–	10¾
40	20	10	–	96	49	4	–	2	11	–	6	1½	0	11	–	1	–
41	21	–	3	97	49	14	3	2	12	–	6	2⅝	0	12	–	1	1
42	21	10	6	98	50	4	6	2	13	–	6	3¾	0	13	–	1	2¼
43	22	–	9	99	50	14	9	2	14	–	6	4¾	0	14	–	1	3¼
44	22	11	–	100	51	5	–	2	15	–	6	5¾	0	15	–	1	4¼
45	23	1	3	200	102	10	–	2	16	–	6	7	0	16	–	1	5½
46	23	11	6	300	153	15	–	2	17	–	6	8	0	17	–	1	6½
47	24	1	9	400	205	–	–	2	18	–	6	9¼	0	18	–	1	7¾
48	24	12	–	500	256	5	–	2	19	–	6	10¼	0	19	–	1	8¾
49	25	2	3	600	307	10	–	2	20	–	6	11¼	0	20	–	1	9¾
50	25	12	6	700	358	15	–	2	21	–	7	–½	0	21	–	1	11
51	26	2	9	800	410	–	–	2	22	–	7	1⅝	0	22	–	2	–
52	26	13	–	900	461	5	–	2	23	–	7	2¾	0	23	–	2	1¼
53	27	3	3	1000	512	10	–	2	24	–	7	3¾	0	24	–	2	2¼
54	27	13	6	2000	1025	–	–	2	25	–	7	4¾	0	25	–	2	3¼
55	28	3	9	3000	1537	10	–	2	26	–	7	6	0	26	–	2	4½
56	28	14	–	4000	2050	–	–	2	27	–	7	7	0	27	–	2	5½

10*s*. 6*d*. *per Cwt*.

£10. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	10	6	57	29	18	6	1	–	–	2	7½	3	–	–	7	10½
2	1	1	–	58	30	9	–	1	1	–	2	8½	3	1	–	7	11½
3	1	11	6	59	30	19	6	1	2	–	2	9¾	3	2	–	8	–¾
4	2	2	–	60	31	10	–	1	3	–	2	10¾	3	3	–	8	1¾
5	2	12	6	61	32	–	6	1	4	–	3	–	3	4	–	8	3
6	3	3	–	62	32	11	–	1	5	–	3	1	3	5	–	8	4
7	3	13	6	63	33	1	6	1	6	–	3	2¼	3	6	–	8	5¼
8	4	4	–	64	33	12	–	1	7	–	3	3¼	3	7	–	8	6¼
9	4	14	6	65	34	2	6	1	8	–	3	4½	3	8	–	8	7½
10	5	5	–	66	34	13	–	1	9	–	3	5½	3	9	–	8	8½
11	5	15	6	67	35	3	6	1	10	–	3	6¾	3	10	–	8	9¾
12	6	6	–	68	35	14	–	1	11	–	3	7¾	3	11	–	8	10¾
13	6	16	6	69	36	4	6	1	12	–	3	9	3	12	–	9	–
14	7	7	–	70	36	15	–	1	13	–	3	10	3	13	–	9	1
15	7	17	6	71	37	5	6	1	14	–	3	11¼	3	14	–	9	2¼
16	8	8	–	72	37	16	–	1	15	–	4	–¼	3	15	–	9	3¼
17	8	18	6	73	38	6	6	1	16	–	4	1½	3	16	–	9	4½
18	9	9	–	74	38	17	–	1	17	–	4	2½	3	17	–	9	5½
19	9	19	6	75	39	7	6	1	18	–	4	3¾	3	18	–	9	6¾
20	10	10	–	76	39	18	–	1	19	–	4	4¾	3	19	–	9	7¾
21	11	–	6	77	40	8	6	1	20	–	4	6	3	20	–	9	9
22	11	11	–	78	40	19	–	1	21	–	4	7	3	21	–	9	10
23	12	1	6	79	41	9	6	1	22	–	4	8¼	3	22	–	9	11¼
24	12	12	–	80	42	–	–	1	23	–	4	9¼	3	23	–	10	–¼
25	13	2	6	81	42	10	6	1	24	–	4	10½	3	24	–	10	1½
26	13	13	–	82	43	1	–	1	25	–	4	11½	3	25	–	10	2½
27	14	3	6	83	43	11	6	1	26	–	5	–¾	3	26	–	10	3¾
28	14	14	–	84	44	2	–	1	27	–	5	1¾	3	27	–	10	4¾
29	15	4	6	85	44	12	6	2	—	–	5	3					
30	15	15	–	86	45	3	–	2	1	–	5	4	0	1	–	–	1
31	16	5	6	87	45	13	6	2	2	–	5	5¼	0	2	–	–	2¼
32	16	16	–	88	46	4	–	2	3	–	5	6¼	0	3	–	–	3¼
33	17	6	6	89	46	14	6	2	4	–	5	7½	0	4	–	–	4½
34	17	17	–	90	47	5	–	2	5	–	5	8½	0	5	–	–	5½
35	18	7	6	91	47	15	6	2	6	–	5	9¾	0	6	–	–	6¾
36	18	18	–	92	48	6	–	2	7	–	5	10¾	0	7	–	–	7¾
37	19	8	6	93	48	16	6	2	8	–	6	–	0	8	–	–	9
38	19	19	–	94	49	7	–	2	9	–	6	1	0	9	–	–	10
39	20	9	6	95	49	17	6	2	10	–	6	2¼	0	10	–	–	11¼
40	21	–	–	96	50	8	–	2	11	–	6	3¼	0	11	–	1	–¼
41	21	10	6	97	50	18	6	2	12	–	6	4½	0	12	–	1	1½
42	22	1	–	98	51	9	–	2	13	–	6	5½	0	13	–	1	2½
43	22	11	6	99	51	19	6	2	14	–	6	6¾	0	14	–	1	3¾
44	23	2	–	100	52	10	–	2	15	–	6	7¾	0	15	–	1	4¾
45	23	12	6	200	105	–	–	2	16	–	6	9	0	16	–	1	6
46	24	3	–	300	157	10	–	2	17	–	6	10	0	17	–	1	7
47	24	13	6	400	210	–	–	2	18	–	6	11¼	0	18	–	1	8¼
48	25	4	–	500	262	10	–	2	19	–	7	–¼	0	19	–	1	9¼
49	25	14	6	600	315	–	–	2	20	–	7	1½	0	20	–	1	10½
50	26	5	–	700	367	10	–	2	21	–	7	2½	0	21	–	1	11½
51	26	15	6	800	420	–	–	2	22	–	7	3¾	0	22	–	2	–¾
52	27	6	–	900	472	10	–	2	23	–	7	4¾	0	23	–	2	1¾
53	27	16	6	1000	525	–	–	2	24	–	7	6	0	24	–	2	3
54	28	7	–	2000	1050	–	–	2	25	–	7	7	0	25	–	2	4
55	28	17	6	3000	1575	–	–	2	26	–	7	8¼	0	26	–	2	5¼
56	29	8	–	4000	2100	–	–	2	27	–	7	9¼	0	27	–	2	6¼

£10. 15s. per Ton.

10*s*. 9*d*. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	10	9	57	30	12	9	1	–	–	2	8¼	3	–	–	8	–¾
2	1	1	6	58	31	3	6	1	1	–	2	9¼	3	1	–	8	1¾
3	1	12	3	59	31	14	3	1	2	–	2	10½	3	2	–	8	3
4	2	3	–	60	32	5	–	1	3	–	2	11½	3	3	–	8	4
5	2	13	9	61	32	15	9	1	4	–	3	–¾	3	4	–	8	5¼
6	3	4	6	62	33	6	6	1	5	–	3	2	3	5	–	8	6½
7	3	15	3	63	33	17	3	1	6	–	3	3	3	6	–	8	7½
8	4	6	–	64	34	8	–	1	7	–	3	4¼	3	7	–	8	8¾
9	4	16	9	65	34	18	9	1	8	–	3	5¼	3	8	–	8	9¾
10	5	7	6	66	35	9	6	1	9	–	3	6½	3	9	–	8	11
11	5	18	3	67	36	–	3	1	10	–	3	7¾	3	10	–	9	–¼
12	6	9	–	68	36	11	–	1	11	–	3	8¾	3	11	–	9	1¼
13	6	19	9	69	37	1	9	1	12	–	3	10	3	12	–	9	2½
14	7	10	6	70	37	12	6	1	13	–	3	11	3	13	–	9	3½
15	8	1	3	71	38	3	3	1	14	–	4	–¼	3	14	–	9	4¾
16	8	12	–	72	38	14	–	1	15	–	4	1½	3	15	–	9	6
17	9	2	9	73	39	4	9	1	16	–	4	2½	3	16	–	9	7
18	9	13	6	74	39	15	6	1	17	–	4	3¾	3	17	–	9	8¼
19	10	4	3	75	40	6	3	1	18	–	4	4¾	3	18	–	9	9¼
20	10	15	–	76	40	17	–	1	19	–	4	6	3	19	–	9	10½
21	11	5	9	77	41	7	9	1	20	–	4	7¼	3	20	–	9	11¾
22	11	16	6	78	41	18	6	1	21	–	4	8¼	3	21	–	10	–¾
23	12	7	3	79	42	9	3	1	22	–	4	9½	3	22	–	10	2
24	12	18	–	80	43	–	–	1	23	–	4	10½	3	23	–	10	3
25	13	8	9	81	43	10	9	1	24	–	4	11¾	3	24	–	10	4¼
26	13	19	6	82	44	1	6	1	25	–	5	1	3	25	–	10	5½
27	14	10	3	83	44	12	3	1	26	–	5	2	3	26	–	10	6½
28	15	1	–	84	45	3	–	1	27	–	5	3¼	3	27	–	10	7¾
29	15	11	9	85	45	13	9	2	—	–	5	4½					
30	16	2	6	86	46	4	6	2	1	–	5	5½	0	1	–	–	1
31	16	13	3	87	46	15	3	2	2	–	5	6¾	0	2	–	–	2¼
32	17	4	–	88	47	6	–	2	3	–	5	7¾	0	3	–	–	3¼
33	17	14	9	89	47	16	9	2	4	–	5	9	0	4	–	–	4½
34	18	5	6	90	48	7	6	2	5	–	5	10¼	0	5	–	–	5¾
35	18	16	3	91	48	18	3	2	6	–	5	11¼	0	6	–	–	6¾
36	19	7	–	92	49	9	–	2	7	–	6	–½	0	7	–	–	8
37	19	17	9	93	49	19	9	2	8	–	6	1½	0	8	–	–	9
38	20	8	6	94	50	10	6	2	9	–	6	2¾	0	9	–	–	10¼
39	20	19	3	95	51	1	3	2	10	–	6	4	0	10	–	–	11½
40	21	10	–	96	51	12	–	2	11	–	6	5	0	11	–	1	–½
41	22	–	9	97	52	2	9	2	12	–	6	6¼	0	12	–	1	1¾
42	22	11	6	98	52	13	6	2	13	–	6	7¼	0	13	–	1	2¾
43	23	2	3	99	53	4	3	2	14	–	6	8½	0	14	–	1	4
44	23	13	–	100	53	15	–	2	15	–	6	9¾	0	15	–	1	5¼
45	24	3	9	200	107	10	–	2	16	–	6	10¾	0	16	–	1	6¼
46	24	14	6	300	161	5	–	2	17	–	7	–	0	17	–	1	7½
47	25	5	3	400	215	–	–	2	18	–	7	1	0	18	–	1	8½
48	25	16	–	500	268	15	–	2	19	–	7	2¼	0	19	–	1	9¾
49	26	6	9	600	322	10	–	2	20	–	7	3½	0	20	–	1	11
50	26	17	6	700	376	5	–	2	21	–	7	4½	0	21	–	2	–
51	27	8	3	800	430	–	–	2	22	–	7	5¾	0	22	–	2	1¼
52	27	19	–	900	483	15	–	2	23	–	7	6¾	0	23	–	2	2¼
53	28	9	9	1000	537	10	–	2	24	–	7	8	0	24	–	2	3½
54	29	–	6	2000	1075	–	–	2	25	–	7	9¼	0	25	–	2	4¾
55	29	11	3	3000	1612	10	–	2	26	–	7	10¼	0	26	–	2	5¾
56	30	2	–	4000	2150	–	–	2	27	–	7	11½	0	27	–	2	7

11*s*. *per Cwt*.

£11. ***per Ton.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	11	–	57	31	7	–	1	–	–	2	9	3	–	–	8	3
2	1	2	–	58	31	18	–	1	1	–	2	10	3	1	–	8	4
3	1	13	–	59	32	9	–	1	2	–	2	11¼	3	2	–	8	5¼
4	2	4	–	60	33	–	–	1	3	–	3	–½	3	3	–	8	6½
5	2	15	–	61	33	11	–	1	4	–	3	1½	3	4	–	8	7½
6	3	6	–	62	34	2	–	1	5	–	3	2¾	3	5	–	8	8¾
7	3	17	–	63	34	13	–	1	6	–	3	4	3	6	–	8	10
8	4	8	–	64	35	4	–	1	7	–	3	5¼	3	7	–	8	11¼
9	4	19	–	65	35	15	–	1	8	–	3	6¼	3	8	–	9	–¼
10	5	10	–	66	36	6	–	1	9	–	3	7½	3	9	–	9	1½
11	6	1	–	67	36	17	–	1	10	–	3	8¾	3	10	–	9	2¾
12	6	12	–	68	37	8	–	1	11	–	3	9¾	3	11	–	9	3¾
13	7	3	–	69	37	19	–	1	12	–	3	11	3	12	–	9	5
14	7	14	–	70	38	10	–	1	13	–	4	–¼	3	13	–	9	6¼
15	8	5	–	71	39	1	–	1	14	–	4	1½	3	14	–	9	7½
16	8	16	–	72	39	12	–	1	15	–	4	2½	3	15	–	9	8½
17	9	7	–	73	40	3	–	1	16	–	4	3¾	3	16	–	9	9¾
18	9	18	–	74	40	14	–	1	17	–	4	5	3	17	–	9	11
19	10	9	–	75	41	5	–	1	18	–	4	6	3	18	–	10	–
20	11	–	–	76	41	16	–	1	19	–	4	7¼	3	19	–	10	1¼
21	11	11	–	77	42	7	–	1	20	–	4	8½	3	20	–	10	2½
22	12	2	–	78	42	18	–	1	21	–	4	9¾	3	21	–	10	3¾
23	12	13	–	79	43	9	–	1	22	–	4	10¾	3	22	–	10	4¾
24	13	4	–	80	44	–	–	1	23	–	5	–	3	23	–	10	6
25	13	15	–	81	44	11	–	1	24	–	5	1¼	3	24	–	10	7¼
26	14	6	–	82	45	2	–	1	25	–	5	2¼	3	25	–	10	8¼
27	14	17	–	83	45	13	–	1	26	–	5	3½	3	26	–	10	9½
28	15	8	–	84	46	4	–	1	27	–	5	4¾	3	27	–	10	10¾
29	15	19	–	85	46	15	–	2	—	–	5	6					
30	16	10	–	86	47	6	–	2	1	–	5	7	0	1	–	–	1
31	17	1	–	87	47	17	–	2	2	–	5	8¼	0	2	–	–	2¼
32	17	12	–	88	48	8	–	2	3	–	5	9½	0	3	–	–	3½
33	18	3	–	89	48	19	–	2	4	–	5	10½	0	4	–	–	4½
34	18	14	–	90	49	10	–	2	5	–	5	11¾	0	5	–	–	5¾
35	19	5	–	91	50	1	–	2	6	–	6	1	0	6	–	–	7
36	19	16	–	92	50	12	–	2	7	–	6	2¼	0	7	–	–	8¼
37	20	7	–	93	51	3	–	2	8	–	6	3¼	0	8	–	–	9¼
38	20	18	–	94	51	14	–	2	9	–	6	4½	0	9	–	–	10½
39	21	9	–	95	52	5	–	2	10	–	6	5¾	0	10	–	–	11¾
40	22	–	–	96	52	16	–	2	11	–	6	6¾	0	11	–	1	–¾
41	22	11	–	97	53	7	–	2	12	–	6	8	0	12	–	1	2
42	23	2	–	98	53	18	–	2	13	–	6	9¼	0	13	–	1	3¼
43	23	13	–	99	54	9	–	2	14	–	6	10½	0	14	–	1	4½
44	24	4	–	100	55	–	–	2	15	–	6	11½	0	15	–	1	5½
45	24	15	–	200	110	–	–	2	16	–	7	–¾	0	16	–	1	6¾
46	25	6	–	300	165	–	–	2	17	–	7	2	0	17	–	1	8
47	25	17	–	400	220	–	–	2	18	–	7	3	0	18	–	1	9
48	26	8	–	500	275	–	–	2	19	–	7	4¼	0	19	–	1	10¼
49	26	19	–	600	330	–	–	2	20	–	7	5½	0	20	–	1	11½
50	27	10	–	700	385	–	–	2	21	–	7	6¾	0	21	–	2	–¾
51	28	1	–	800	440	–	–	2	22	–	7	7¾	0	22	–	2	1¾
52	28	12	–	900	495	–	–	2	23	–	7	9	0	23	–	2	3
53	29	3	–	1000	550	–	–	2	24	–	7	10¼	0	24	–	2	4¼
54	29	14	–	2000	1100	–	–	2	25	–	7	11¼	0	25	–	2	5¼
55	30	5	–	3000	1650	–	–	2	26	–	8	–½	0	26	–	2	6½
56	30	16	–	4000	2200	–	–	2	27	–	8	1¾	0	27	–	2	7¾

11s. 3d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	11	3	57	32	1	3	1	–	–	2	9¾	3	–	–	8	5¼
2	1	2	6	58	32	12	6	1	1	–	2	10¾	3	1	–	8	6¼
3	1	13	9	59	33	3	9	1	2	–	3	–	3	2	–	8	7½
4	2	5	–	60	33	15	–	1	3	–	3	1¼	3	3	–	8	8¾
5	2	16	3	61	34	6	3	1	4	–	3	2½	3	4	–	8	10
6	3	7	6	62	34	17	6	1	5	–	3	3¾	3	5	–	8	11¼
7	3	18	9	63	35	8	9	1	6	–	3	4¾	3	6	–	9	–¼
8	4	10	–	64	36	–	–	1	7	–	3	6	3	7	–	9	1½
9	5	1	3	65	36	11	3	1	8	–	3	7¼	3	8	–	9	2¾
10	5	12	6	66	37	2	6	1	9	–	3	8½	3	9	–	9	4
11	6	3	9	67	37	13	9	1	10	–	3	9¾	3	10	–	9	5¼
12	6	15	–	68	38	5	–	1	11	–	3	11	3	11	–	9	6½
13	7	6	3	69	38	16	3	1	12	–	4	–	3	12	–	9	7½
14	7	17	6	70	39	7	6	1	13	–	4	1¼	3	13	–	9	8¾
15	8	8	9	71	39	18	9	1	14	–	4	2½	3	14	–	9	10
16	9	–	–	72	40	10	–	1	15	–	4	3¾	3	15	–	9	11¼
17	9	11	3	73	41	1	3	1	16	–	4	5	3	16	–	10	–½
18	10	2	6	74	41	12	6	1	17	–	4	6	3	17	–	10	1½
19	10	13	9	75	42	3	9	1	18	–	4	7¼	3	18	–	10	2¾
20	11	5	–	76	42	15	–	1	19	–	4	8½	3	19	–	10	4
21	11	16	3	77	43	6	3	1	20	–	4	9¾	3	20	–	10	5¼
22	12	7	6	78	43	17	6	1	21	–	4	11	3	21	–	10	6½
23	12	18	9	79	44	8	9	1	22	–	5	–¼	3	22	–	10	7¾
24	13	10	–	80	45	–	–	1	23	–	5	1¼	3	23	–	10	8¾
25	14	1	3	81	45	11	3	1	24	–	5	2½	3	24	–	10	10
26	14	12	6	82	46	2	6	1	25	–	5	3¾	3	25	–	10	11¼
27	15	3	9	83	46	13	9	1	26	–	5	5	3	26	–	11	–½
28	15	15	–	84	47	5	–	1	27	–	5	6¼	3	27	–	11	1¾
29	16	6	3	85	47	16	3	2	—	–	5	7½					
30	16	17	6	86	48	7	6	2	1	–	5	8½	0	1	–	–	1
31	17	8	9	87	48	18	9	2	2	–	5	9¾	0	2	–	–	2¼
32	18	–	–	88	49	10	–	2	3	–	5	11	0	3	–	–	3½
33	18	11	3	89	50	1	3	2	4	–	6	–¼	0	4	–	–	4¾
34	19	2	6	90	50	12	6	2	5	–	6	1½	0	5	–	–	6
35	19	13	9	91	51	3	9	2	6	–	6	2½	0	6	–	–	7
36	20	5	–	92	51	15	–	2	7	–	6	3¾	0	7	–	–	8¼
37	20	16	3	93	52	6	3	2	8	–	6	5	0	8	–	–	9½
38	21	7	6	94	52	17	6	2	9	–	6	6¼	0	9	–	–	10¾
39	21	18	9	95	53	8	9	2	10	–	6	7½	0	10	–	1	–
40	22	10	–	96	54	–	–	2	11	–	6	8¾	0	11	–	1	1¼
41	23	1	3	97	54	11	3	2	12	–	6	9¾	0	12	–	1	2¼
42	23	12	6	98	55	2	6	2	13	–	6	11	0	13	–	1	3½
43	24	3	9	99	55	13	9	2	14	–	7	–¼	0	14	–	1	4¾
44	24	15	–	100	56	5	–	2	15	–	7	1½	0	15	–	1	6
45	25	6	3	200	112	10	–	2	16	–	7	2¾	0	16	–	1	7¼
46	25	17	6	300	168	15	–	2	17	–	7	3¾	0	17	–	1	8¼
47	26	8	9	400	225	–	–	2	18	–	7	5	0	18	–	1	9½
48	27	–	–	500	281	5	–	2	19	–	7	6¼	0	19	–	1	10¾
49	27	11	3	600	337	10	–	2	20	–	7	7½	0	20	–	2	–
50	28	2	6	700	393	15	–	2	21	–	7	8¾	0	21	–	2	1¼
51	28	13	9	800	450	–	–	2	22	–	7	10	0	22	–	2	2½
52	29	5	–	900	506	5	–	2	23	–	7	11	0	23	–	2	3½
53	29	16	3	1000	562	10	–	2	24	–	8	–¼	0	24	–	2	4¾
54	30	7	6	2000	1125	–	–	2	25	–	8	1½	0	25	–	2	6
55	30	18	9	3000	1687	10	–	2	26	–	8	2¾	0	26	–	2	7¼
56	31	10	–	4000	2250	–	–	2	27	–	8	4	0	27	–	2	8½

11*s*. 6*d*. *per Cwt*. £11. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	11	6	57	32	15	6	1	-	-	2	10½	3	-	-	8	7½
2	1	3	-	58	33	7	-	1	1	-	2	11½	3	1	-	8	8½
3	1	14	6	59	33	18	6	1	2	-	3	-¾	3	2	-	8	9¾
4	2	6	-	60	34	10	-	1	3	-	3	2	3	3	-	8	11
5	2	17	6	61	35	1	6	1	4	-	3	3¼	3	4	-	9	-¼
6	3	9	-	62	35	13	-	1	5	-	3	4½	3	5	-	9	1½
7	4	-	6	63	36	4	6	1	6	-	3	5¾	3	6	-	9	2¾
8	4	12	-	64	36	16	-	1	7	-	3	7	3	7	-	9	4
9	5	3	6	65	37	7	6	1	8	-	3	8¼	3	8	-	9	5¼
10	5	15	-	66	37	19	-	1	9	-	3	9½	3	9	-	9	6½
11	6	6	6	67	38	10	6	1	10	-	3	10¾	3	10	-	9	7¾
12	6	18	-	68	39	2	-	1	11	-	4	-	3	11	-	9	9
13	7	9	6	69	39	13	6	1	12	-	4	1¼	3	12	-	9	10¼
14	8	1	-	70	40	5	-	1	13	-	4	2½	3	13	-	9	11½
15	8	12	6	71	40	16	6	1	14	-	4	3¾	3	14	-	10	-¾
16	9	4	-	72	41	8	-	1	15	-	4	4¾	3	15	-	10	1¾
17	9	15	6	73	41	19	6	1	16	-	4	6	3	16	-	10	3
18	10	7	-	74	42	11	-	1	17	-	4	7¼	3	17	-	10	4¼
19	10	18	6	75	43	2	6	1	18	-	4	8½	3	18	-	10	5½
20	11	10	-	76	43	14	-	1	19	-	4	9¾	3	19	-	10	6¾
21	12	1	6	77	44	5	6	1	20	-	4	11	3	20	-	10	8
22	12	13	-	78	44	17	-	1	21	-	5	-¼	3	21	-	10	9¼
23	13	4	6	79	45	8	6	1	22	-	5	1½	3	22	-	10	10½
24	13	16	-	80	46	-	-	1	23	-	5	2¾	3	23	-	10	11¾
25	14	7	6	81	46	11	6	1	24	-	5	4	3	24	-	11	1
26	14	19	-	82	47	3	-	1	25	-	5	5¼	3	25	-	11	2¼
27	15	10	6	83	47	14	6	1	26	-	5	6½	3	26	-	11	3½
28	16	2	-	84	48	6	-	1	27	-	5	7¾	3	27	-	11	4¾
29	16	13	6	85	48	17	6	2	—	-	5	9					
30	17	5	-	86	49	9	-	2	1	-	5	10	0	1	-	-	1
31	17	16	6	87	50	-	6	2	2	-	5	11¼	0	2	-	-	2¼
32	18	8	-	88	50	12	-	2	3	-	6	-½	0	3	-	-	3½
33	18	19	6	89	51	3	6	2	4	-	6	1¾	0	4	-	-	4¾
34	19	11	-	90	51	15	-	2	5	-	6	3	0	5	-	-	6
35	20	2	6	91	52	6	6	2	6	-	6	4¼	0	6	-	-	7¼
36	20	14	-	92	52	18	-	2	7	-	6	5½	0	7	-	-	8½
37	21	5	6	93	53	9	6	2	8	-	6	6¾	0	8	-	-	9¾
38	21	17	-	94	54	1	-	2	9	-	6	8	0	9	-	-	11
39	22	8	6	95	54	12	6	2	10	-	6	9¼	0	10	-	1	-¼
40	23	-	-	96	55	4	-	2	11	-	6	10½	0	11	-	1	1½
41	23	11	6	97	55	15	6	2	12	-	6	11¾	0	12	-	1	2¾
42	24	3	-	98	56	7	-	2	13	-	7	1	0	13	-	1	4
43	24	14	6	99	56	18	6	2	14	-	7	2¼	0	14	-	1	5¼
44	25	6	-	100	57	10	-	2	15	-	7	3¼	0	15	-	1	6¼
45	25	17	6	200	115	-	-	2	16	-	7	4½	0	16	-	1	7½
46	26	9	-	300	172	10	-	2	17	-	7	5¾	0	17	-	1	8¾
47	27	-	6	400	230	-	-	2	18	-	7	7	0	18	-	1	10
48	27	12	-	500	287	10	-	2	19	-	7	8¼	0	19	-	1	11¼
49	28	3	6	600	345	-	-	2	20	-	7	9½	0	20	-	2	-½
50	28	15	-	700	402	10	-	2	21	-	7	10¾	0	21	-	2	1¾
51	29	6	6	800	460	-	-	2	22	-	8	-	0	22	-	2	3
52	29	18	-	900	517	10	-	2	23	-	8	1¼	0	23	-	2	4¼
53	30	9	6	1000	575	-	-	2	24	-	8	2½	0	24	-	2	5½
54	31	1	-	2000	1150	-	-	2	25	-	8	3¾	0	25	-	2	6¾
55	31	12	6	3000	1725	-	-	2	26	-	8	5	0	26	-	2	8
56	32	4	-	4000	2300	-	-	2	27	-	8	6¼	0	27	-	2	9¼

£11. 13s. 4d. per Ton. 1¼d. per lb. 11s. 8d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	11	8	57	33	5	–	1	–	–	2	11	3	–	–	8	9
2	1	3	4	58	33	16	8	1	1	–	3	–¼	3	1	–	8	10¼
3	1	15	–	59	34	8	4	1	2	–	3	1½	3	2	–	8	11½
4	2	6	8	60	35	–	–	1	3	–	3	2¾	3	3	–	9	–¾
5	2	18	4	61	35	11	8	1	4	–	3	4	3	4	–	9	2
6	3	10	–	62	36	3	4	1	5	–	3	5¼	3	5	–	9	3¼
7	4	1	8	63	36	15	–	1	6	–	3	6½	3	6	–	9	4½
8	4	13	4	64	37	6	8	1	7	–	3	7¾	3	7	–	9	5¾
9	5	5	–	65	37	18	4	1	8	–	3	9	3	8	–	9	7
10	5	16	8	66	38	10	–	1	9	–	3	10¼	3	9	–	9	8¼
11	6	8	4	67	39	1	8	1	10	–	3	11½	3	10	–	9	9½
12	7	–	–	68	39	13	4	1	11	–	4	–¾	3	11	–	9	10¾
13	7	11	8	69	40	5	–	1	12	–	4	2	3	12	–	10	–
14	8	3	4	70	40	16	8	1	13	–	4	3¼	3	13	–	10	1¼
15	8	15	–	71	41	8	4	1	14	–	4	4½	3	14	–	10	2½
16	9	6	8	72	42	–	–	1	15	–	4	5¾	3	15	–	10	3¾
17	9	18	4	73	42	11	8	1	16	–	4	7	3	16	–	10	5
18	10	10	–	74	43	3	4	1	17	–	4	8¼	3	17	–	10	6¼
19	11	1	8	75	43	15	–	1	18	–	4	9½	3	18	–	10	7½
20	11	13	4	76	44	6	8	1	19	–	4	10¾	3	19	–	10	8¾
21	12	5	–	77	44	18	4	1	20	–	5	–	3	20	–	10	10
22	12	16	8	78	45	10	–	1	21	–	5	1¼	3	21	–	10	11¼
23	13	8	4	79	46	1	8	1	22	–	5	2½	3	22	–	11	–½
24	14	–	–	80	46	13	4	1	23	–	5	3¾	3	23	–	11	1¾
25	14	11	8	81	47	5	–	1	24	–	5	5	3	24	–	11	3
26	15	3	4	82	47	16	8	1	25	–	5	6¼	3	25	–	11	4¼
27	15	15	–	83	48	8	4	1	26	–	5	7½	3	26	–	11	5½
28	16	6	8	84	49	–	–	1	27	–	5	8¾	3	27	–	11	6¾
29	16	18	4	85	49	11	8	2	—	–	5	10					
30	17	10	–	86	50	3	4	2	1	–	5	11¼	0	1	–	–	1¼
31	18	1	8	87	50	15	–	2	2	–	6	–½	0	2	–	–	2½
32	18	13	4	88	51	6	8	2	3	–	6	1¾	0	3	–	–	3¾
33	19	5	–	89	51	18	4	2	4	–	6	3	0	4	–	–	5
34	19	16	8	90	52	10	–	2	5	–	6	4¼	0	5	–	–	6¼
35	20	8	4	91	53	1	8	2	6	–	6	5½	0	6	–	–	7½
36	21	–	–	92	53	13	4	2	7	–	6	6¾	0	7	–	–	8¾
37	21	11	8	93	54	5	–	2	8	–	6	8	0	8	–	–	10
38	22	3	4	94	54	16	8	2	9	–	6	9¼	0	9	–	–	11¼
39	22	15	–	95	55	8	4	2	10	–	6	10½	0	10	–	1	–½
40	23	6	8	96	56	–	–	2	11	–	6	11¾	0	11	–	1	1¾
41	23	18	4	97	56	11	8	2	12	–	7	1	0	12	–	1	3
42	24	10	–	98	57	3	4	2	13	–	7	2¼	0	13	–	1	4¼
43	25	1	8	99	57	15	–	2	14	–	7	3½	0	14	–	1	5½
44	25	13	4	100	58	6	8	2	15	–	7	4¾	0	15	–	1	6¾
45	26	5	–	200	116	13	4	2	16	–	7	6	0	16	–	1	8
46	26	16	8	300	175	–	–	2	17	–	7	7¼	0	17	–	1	9¼
47	27	8	4	400	233	6	8	2	18	–	7	8½	0	18	–	1	10½
48	28	–	–	500	291	13	4	2	19	–	7	9¾	0	19	–	1	11¾
49	28	11	8	600	350	–	–	2	20	–	7	11	0	20	–	2	1
50	29	3	4	700	408	6	8	2	21	–	8	–¼	0	21	–	2	2¼
51	29	15	–	800	466	13	4	2	22	–	8	1½	0	22	–	2	3½
52	30	6	8	900	525	–	–	2	23	–	8	2¾	0	23	–	2	4¾
53	30	18	4	1000	583	6	8	2	24	–	8	4	0	24	–	2	6
54	31	10	–	2000	1166	13	4	2	25	–	8	5¼	0	25	–	2	7¼
55	32	1	8	3000	1750	–	–	2	26	–	8	6½	0	26	–	2	8½
56	32	13	4	4000	2333	6	8	2	27	–	8	7¾	0	27	–	2	9¾

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	11	9	57	33	9	9	1	–	–	2	11¼	3	–	–	8	9¾
2	1	3	6	58	34	1	6	1	1	–	3	–½	3	1	–	8	11
3	1	15	3	59	34	13	3	1	2	–	3	1¾	3	2	–	9	–¼
4	2	7	–	60	35	5	–	1	3	–	3	3	3	3	–	9	1½
5	2	18	9	61	35	16	9	1	4	–	3	4¼	3	4	–	9	2¾
6	3	10	6	62	36	8	6	1	5	–	3	5½	3	5	–	9	4
7	4	2	3	63	37	–	3	1	6	–	3	6¾	3	6	–	9	5¼
8	4	14	–	64	37	12	–	1	7	–	3	8	3	7	–	9	6½
9	5	5	9	65	38	3	9	1	8	–	3	9¼	3	8	–	9	7¾
10	5	17	6	66	38	15	6	1	9	–	3	10½	3	9	–	9	9
11	6	9	3	67	39	7	3	1	10	–	3	11¾	3	10	–	9	10¼
12	7	1	–	68	39	19	–	1	11	–	4	1	3	11	–	9	11½
13	7	12	9	69	40	10	9	1	12	–	4	2¼	3	12	–	10	–¾
14	8	4	6	70	41	2	6	1	13	–	4	3½	3	13	–	10	2
15	8	16	3	71	41	14	3	1	14	–	4	4¾	3	14	–	10	3¼
16	9	8	–	72	42	6	–	1	15	–	4	6	3	15	–	10	4½
17	9	19	9	73	42	17	9	1	16	–	4	7¼	3	16	–	10	5¾
18	10	11	6	74	43	9	6	1	17	–	4	8½	3	17	–	10	7
19	11	3	3	75	44	1	3	1	18	–	4	9¾	3	18	–	10	8¼
20	11	15	–	76	44	13	–	1	19	–	4	11	3	19	–	10	9½
21	12	6	9	77	45	4	9	1	20	–	5	–¼	3	20	–	10	10¾
22	12	18	6	78	45	16	6	1	21	–	5	1½	3	21	–	11	–
23	13	10	3	79	46	8	3	1	22	–	5	2¾	3	22	–	11	1¼
24	14	2	–	80	47	–	–	1	23	–	5	4	3	23	–	11	2½
25	14	13	9	81	47	11	9	1	24	–	5	5¼	3	24	–	11	3¾
26	15	5	6	82	48	3	6	1	25	–	5	6½	3	25	–	11	5
27	15	17	3	83	48	15	3	1	26	–	5	7¾	3	26	–	11	6¼
28	16	9	–	84	49	7	–	1	27	–	5	9	3	27	–	11	7½
29	17	–	9	85	49	18	9	2	—	–	5	10½					
30	17	12	6	86	50	10	6	2	1	–	5	11¾	0	1	–	–	1¼
31	18	4	3	87	51	2	3	2	2	–	6	1	0	2	–	–	2½
32	18	16	–	88	51	14	–	2	3	–	6	2¼	0	3	–	–	3¾
33	19	7	9	89	52	5	9	2	4	–	6	3½	0	4	–	–	5
34	19	19	6	90	52	17	6	2	5	–	6	4¾	0	5	–	–	6¼
35	20	11	3	91	53	9	3	2	6	–	6	6	0	6	–	–	7½
36	21	3	–	92	54	1	–	2	7	–	6	7¼	0	7	–	–	8¾
37	21	14	9	93	54	12	9	2	8	–	6	8½	0	8	–	–	10
38	22	6	6	94	55	4	6	2	9	–	6	9¾	0	9	–	–	11¼
39	22	18	3	95	55	16	3	2	10	–	6	11	0	10	–	1	–½
40	23	10	–	96	56	8	–	2	11	–	7	–¼	0	11	–	1	1¾
41	24	1	9	97	56	19	9	2	12	–	7	1½	0	12	–	1	3
42	24	13	6	98	57	11	6	2	13	–	7	2¾	0	13	–	1	4¼
43	25	5	3	99	58	3	3	2	14	–	7	4	0	14	–	1	5½
44	25	17	–	100	58	15	–	2	15	–	7	5¼	0	15	–	1	6¾
45	26	8	9	200	117	10	–	2	16	–	7	6½	0	16	–	1	8
46	27	–	6	300	176	5	–	2	17	–	7	7¾	0	17	–	1	9¼
47	27	12	3	400	235	–	–	2	18	–	7	9	0	18	–	1	10½
48	28	4	–	500	293	15	–	2	19	–	7	10¼	0	19	–	1	11¾
49	28	15	9	600	352	10	–	2	20	–	7	11½	0	20	–	2	1
50	29	7	6	700	411	5	–	2	21	–	8	–¾	0	21	–	2	2¼
51	29	19	3	800	470	–	–	2	22	–	8	2	0	22	–	2	3½
52	30	11	–	900	528	15	–	2	23	–	8	3¼	0	23	–	2	4¾
53	31	2	9	1000	587	10	–	2	24	–	8	4½	0	24	–	2	6
54	31	14	6	2000	1175	–	–	2	25	–	8	5¾	0	25	–	2	7¼
55	32	6	3	3000	1762	10	–	2	26	–	8	7	0	26	–	2	8½
56	32	18	–	4000	2350	–	–	2	27	–	8	8¼	0	27	–	2	9¾

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	12	–	57	34	4	–	1	–	–	3	–	3	–	–	9	–
2	1	4	–	58	34	16	–	1	1	–	3	1¼	3	1	–	9	1¼
3	1	16	–	59	35	8	–	1	2	–	3	2½	3	2	–	9	2½
4	2	8	–	60	36	–	–	1	3	–	3	3¾	3	3	–	9	3¾
5	3	–	–	61	36	12	–	1	4	–	3	5	3	4	–	9	5
6	3	12	–	62	37	4	–	1	5	–	3	6¼	3	5	–	9	6¼
7	4	4	–	63	37	16	–	1	6	–	3	7½	3	6	–	9	7½
8	4	16	–	64	38	8	–	1	7	–	3	9	3	7	–	9	9
9	5	8	–	65	39	–	–	1	8	–	3	10¼	3	8	–	9	10¼
10	6	–	–	66	39	12	–	1	9	–	3	11½	3	9	–	9	11½
11	6	12	–	67	40	4	–	1	10	–	4	–¾	3	10	–	10	–¾
12	7	4	–	68	40	16	–	1	11	–	4	2	3	11	–	10	2
13	7	16	–	69	41	8	–	1	12	–	4	3¼	3	12	–	10	3¼
14	8	8	–	70	42	–	–	1	13	–	4	4½	3	13	–	10	4½
15	9	–	–	71	42	12	–	1	14	–	4	6	3	14	–	10	6
16	9	12	–	72	43	4	–	1	15	–	4	7¼	3	15	–	10	7¼
17	10	4	–	73	43	16	–	1	16	–	4	8½	3	16	–	10	8½
18	10	16	–	74	44	8	–	1	17	–	4	9¾	3	17	–	10	9¾
19	11	8	–	75	45	–	–	1	18	–	4	11	3	18	–	10	11
20	12	–	–	76	45	12	–	1	19	–	5	–¼	3	19	–	11	–¼
21	12	12	–	77	46	4	–	1	20	–	5	1½	3	20	–	11	1½
22	13	4	–	78	46	16	–	1	21	–	5	3	3	21	–	11	3
23	13	16	–	79	47	8	–	1	22	–	5	4¼	3	22	–	11	4¼
24	14	8	–	80	48	–	–	1	23	–	5	5½	3	23	–	11	5½
25	15	–	–	81	48	12	–	1	24	–	5	6¾	3	24	–	11	6¾
26	15	12	–	82	49	4	–	1	25	–	5	8	3	25	–	11	8
27	16	4	–	83	49	16	–	1	26	–	5	9¼	3	26	–	11	9¼
28	16	16	–	84	50	8	–	1	27	–	5	10½	3	27	–	11	10½
29	17	8	–	85	51	–	–	2	—	–	6	–					
30	18	–	–	86	51	12	–	2	1	–	6	1¼	0	1	–	–	1¼
31	18	12	–	87	52	4	–	2	2	–	6	2½	0	2	–	–	2½
32	19	4	–	88	52	16	–	2	3	–	6	3¾	0	3	–	–	3¾
33	19	16	–	89	53	8	–	2	4	–	6	5	0	4	–	–	5
34	20	8	–	90	54	–	–	2	5	–	6	6¼	0	5	–	–	6¼
35	21	–	–	91	54	12	–	2	6	–	6	7½	0	6	–	–	7½
36	21	12	–	92	55	4	–	2	7	–	6	9	0	7	–	–	9
37	22	4	–	93	55	16	–	2	8	–	6	10¼	0	8	–	–	10¼
38	22	16	–	94	56	8	–	2	9	–	6	11½	0	9	–	–	11½
39	23	8	–	95	57	–	–	2	10	–	7	–¾	0	10	–	1	–¾
40	24	–	–	96	57	12	–	2	11	–	7	2	0	11	–	1	2
41	24	12	–	97	58	4	–	2	12	–	7	3¼	0	12	–	1	3¼
42	25	4	–	98	58	16	–	2	13	–	7	4½	0	13	–	1	4½
43	25	16	–	99	59	8	–	2	14	–	7	6	0	14	–	1	6
44	26	8	–	100	60	–	–	2	15	–	7	7¼	0	15	–	1	7¼
45	27	–	–	200	120	–	–	2	16	–	7	8½	0	16	–	1	8½
46	27	12	–	300	180	–	–	2	17	–	7	9¾	0	17	–	1	9¾
47	28	4	–	400	240	–	–	2	18	–	7	11	0	18	–	1	11
48	28	16	–	500	300	–	–	2	19	–	8	–¼	0	19	–	2	–¼
49	29	8	–	600	360	–	–	2	20	–	8	1½	0	20	–	2	1½
50	30	–	–	700	420	–	–	2	21	–	8	3	0	21	–	2	3
51	30	12	–	800	480	–	–	2	22	–	8	4¼	0	22	–	2	4¼
52	31	4	–	900	540	–	–	2	23	–	8	5½	0	23	–	2	5½
53	31	16	–	1000	600	–	–	2	24	–	8	6¾	0	24	–	2	6¾
54	32	8	–	2000	1200	–	–	2	25	–	8	8	0	25	–	2	8
55	33	–	–	3000	1800	–	–	2	26	–	8	9¼	0	26	–	2	9¼
56	33	12	–	4000	2400	–	–	2	27	–	8	10½	0	27	–	2	10½

12s. 3d. per Cwt. *£12. 5s. per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	12	3	57	34	18	3	1	–	–	3	–¾	3	–	–	9	2¼
2	1	4	6	58	35	10	6	1	1	–	3	2	3	1	–	9	3½
3	1	16	9	59	36	2	9	1	2	–	3	3¼	3	2	–	9	4¾
4	2	9	–	60	36	15	–	1	3	–	3	4½	3	3	–	9	6
5	3	1	3	61	37	7	3	1	4	–	3	6	3	4	–	9	7½
6	3	13	6	62	37	19	6	1	5	–	3	7¼	3	5	–	9	8¾
7	4	5	9	63	38	11	9	1	6	–	3	8½	3	6	–	9	10
8	4	18	–	64	39	4	–	1	7	–	3	9¾	3	7	–	9	11¼
9	5	10	3	65	39	16	3	1	8	–	3	11¼	3	8	–	10	–¾
10	6	2	6	66	40	8	6	1	9	–	4	–½	3	9	–	10	2
11	6	14	9	67	41	–	9	1	10	–	4	1¾	3	10	–	10	3¼
12	7	7	–	68	41	13	–	1	11	–	4	3	3	11	–	10	4½
13	7	19	3	69	42	5	3	1	12	–	4	4½	3	12	–	10	6
14	8	11	6	70	42	17	6	1	13	–	4	5¾	3	13	–	10	7¼
15	9	3	9	71	43	9	9	1	14	–	4	7	3	14	–	10	8½
16	9	16	–	72	44	2	–	1	15	–	4	8¼	3	15	–	10	9¾
17	10	8	3	73	44	14	3	1	16	–	4	9¾	3	16	–	10	11¼
18	11	–	6	74	45	6	6	1	17	–	4	11	3	17	–	11	–½
19	11	12	9	75	45	18	9	1	18	–	5	–¼	3	18	–	11	1¾
20	12	5	–	76	46	11	–	1	19	–	5	1½	3	19	–	11	3
21	12	17	3	77	47	3	3	1	20	–	5	3	3	20	–	11	4½
22	13	9	6	78	47	15	6	1	21	–	5	4¼	3	21	–	11	5¾
23	14	1	9	79	48	7	9	1	22	–	5	5½	3	22	–	11	7
24	14	14	–	80	49	–	–	1	23	–	5	6¾	3	23	–	11	8¼
25	15	6	3	81	49	12	3	1	24	–	5	8¼	3	24	–	11	9¾
26	15	18	6	82	50	4	6	1	25	–	5	9½	3	25	–	11	11
27	16	10	9	83	50	16	9	1	26	–	5	10¾	3	26	–	12	–¼
28	17	3	–	84	51	9	–	1	27	–	6	–	3	27	–	12	1½
29	17	15	3	85	52	1	3	2	—	–	6	1½					
30	18	7	6	86	52	13	6	2	1	–	6	2¾	0	1	–	–	1¼
31	18	19	9	87	53	5	9	2	2	–	6	4	0	2	–	–	2½
32	19	12	–	88	53	18	–	2	3	–	6	5¼	0	3	–	–	3¾
33	20	4	3	89	54	10	3	2	4	–	6	6¾	0	4	–	–	5¼
34	20	16	6	90	55	2	6	2	5	–	6	8	0	5	–	–	6½
35	21	8	9	91	55	14	9	2	6	–	6	9¼	0	6	–	–	7¾
36	22	1	–	92	56	7	–	2	7	–	6	10½	0	7	–	–	9
37	22	13	3	93	56	19	3	2	8	–	7	–	0	8	–	–	10½
38	23	5	6	94	57	11	6	2	9	–	7	1¼	0	9	–	–	11¾
39	23	17	9	95	58	3	9	2	10	–	7	2½	0	10	–	1	1
40	24	10	–	96	58	16	–	2	11	–	7	3¾	0	11	–	1	2¼
41	25	2	3	97	59	8	3	2	12	–	7	5¼	0	12	–	1	3¾
42	25	14	6	98	60	–	6	2	13	–	7	6½	0	13	–	1	5
43	26	6	9	99	60	12	9	2	14	–	7	7¾	0	14	–	1	6¼
44	26	19	–	100	61	5	–	2	15	–	7	9	0	15	–	1	7½
45	27	11	3	200	122	10	–	2	16	–	7	10½	0	16	–	1	9
46	28	3	6	300	183	15	–	2	17	–	7	11¾	0	17	–	1	10¼
47	28	15	9	400	245	–	–	2	18	–	8	1	0	18	–	1	11½
48	29	8	–	500	306	5	–	2	19	–	8	2¼	0	19	–	2	–¾
49	30	–	3	600	367	10	–	2	20	–	8	3¾	0	20	–	2	2¼
50	30	12	6	700	428	15	–	2	21	–	8	5	0	21	–	2	3½
51	31	4	9	800	490	–	–	2	22	–	8	6¼	0	22	–	2	4¾
52	31	17	–	900	551	5	–	2	23	–	8	7½	0	23	–	2	6
53	32	9	3	1000	612	10	–	2	24	–	8	9	0	24	–	2	7½
54	33	1	6	2000	1225	–	–	2	25	–	8	10¼	0	25	–	2	8¾
55	33	13	9	3000	1837	10	–	2	26	–	8	11½	0	26	–	2	10
56	34	6	–	4000	2450	–	–	2	27	–	9	–¾	0	27	–	2	11¼

£12. 10s. *per Ton.*

12*s*. 6*d*. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	12	6	57	35	12	6	1	–	–	3	1½	3	–	–	9	4½
2	1	5	–	58	36	5	–	1	1	–	3	2¾	3	1	–	9	5¾
3	1	17	6	59	36	17	6	1	2	–	3	4	3	2	–	9	7
4	2	10	–	60	37	10	–	1	3	–	3	5½	3	3	–	9	8½
5	3	2	6	61	38	2	6	1	4	–	3	6¾	3	4	–	9	9¾
6	3	15	–	62	38	15	–	1	5	–	3	8	3	5	–	9	11
7	4	7	6	63	39	7	6	1	6	–	3	9½	3	6	–	10	–½
8	5	–	–	64	40	–	–	1	7	–	3	10¾	3	7	–	10	1¾
9	5	12	6	65	40	12	6	1	8	–	4	–	3	8	–	10	3
10	6	5	–	66	41	5	–	1	9	–	4	1½	3	9	–	10	4½
11	6	17	6	67	41	17	6	1	10	–	4	2¾	3	10	–	10	5¾
12	7	10	–	68	42	10	–	1	11	–	4	4	3	11	–	10	7
13	8	2	6	69	43	2	6	1	12	–	4	5½	3	12	–	10	8½
14	8	15	–	70	43	15	–	1	13	–	4	6¾	3	13	–	10	9¾
15	9	7	6	71	44	7	6	1	14	–	4	8¼	3	14	–	10	11¼
16	10	–	–	72	45	–	–	1	15	–	4	9½	3	15	–	11	–½
17	10	12	6	73	45	12	6	1	16	–	4	10¾	3	16	–	11	1¾
18	11	5	–	74	46	5	–	1	17	–	5	–¼	3	17	–	11	3¼
19	11	17	6	75	46	17	6	1	18	–	5	1½	3	18	–	11	4½
20	12	10	–	76	47	10	–	1	19	–	5	2¾	3	19	–	11	5¾
21	13	2	6	77	48	2	6	1	20	–	5	4¼	3	20	–	11	7¼
22	13	15	–	78	48	15	–	1	21	–	5	5½	3	21	–	11	8½
23	14	7	6	79	49	7	6	1	22	–	5	6¾	3	22	–	11	9¾
24	15	–	–	80	50	–	–	1	23	–	5	8¼	3	23	–	11	11¼
25	15	12	6	81	50	12	6	1	24	–	5	9½	3	24	–	12	–½
26	16	5	–	82	51	5	–	1	25	–	5	10¾	3	25	–	12	1¾
27	16	17	6	83	51	17	6	1	26	–	6	–¼	3	26	–	12	3¼
28	17	10	–	84	52	10	–	1	27	–	6	1½	3	27	–	12	4½
29	18	2	6	85	53	2	6	2	—	–	6	3					
30	18	15	–	86	53	15	–	2	1	–	6	4¼	0	1	–	–	1¼
31	19	7	6	87	54	7	6	2	2	–	6	5½	0	2	–	–	2½
32	20	–	–	88	55	–	–	2	3	–	6	7	0	3	–	–	4
33	20	12	6	89	55	12	6	2	4	–	6	8¼	0	4	–	–	5¼
34	21	5	–	90	56	5	–	2	5	–	6	9½	0	5	–	–	6½
35	21	17	6	91	56	17	6	2	6	–	6	11	0	6	–	–	8
36	22	10	–	92	57	10	–	2	7	–	7	–¼	0	7	–	–	9¼
37	23	2	6	93	58	2	6	2	8	–	7	1½	0	8	–	–	10½
38	23	15	–	94	58	15	0	2	9	–	7	3	0	9	–	1	–
39	24	7	6	95	59	7	6	2	10	–	7	4¼	0	10	–	1	1¼
40	25	–	–	96	60	–	–	2	11	–	7	5½	0	11	–	1	2½
41	25	12	6	97	60	12	6	2	12	–	7	7	0	12	–	1	4
42	26	5	–	98	61	5	–	2	13	–	7	8¼	0	13	–	1	5¼
43	26	17	6	99	61	17	6	2	14	–	7	9¾	0	14	–	1	6¾
44	27	10	–	100	62	10	–	2	15	–	7	11	0	15	–	1	8
45	28	2	6	200	125	–	–	2	16	–	8	–¼	0	16	–	1	9¼
46	28	15	–	300	187	10	–	2	17	–	8	1¾	0	17	–	1	10¾
47	29	7	6	400	250	–	–	2	18	–	8	3	0	18	–	2	–
48	30	–	–	500	312	10	–	2	19	–	8	4¼	0	19	–	2	1¼
49	30	12	6	600	375	–	–	2	20	–	8	5¾	0	20	–	2	2¾
50	31	5	–	700	437	10	–	2	21	–	8	7	0	21	–	2	4
51	31	17	6	800	500	–	–	2	22	–	8	8¼	0	22	–	2	5¼
52	32	10	–	900	562	10	–	2	23	–	8	9¾	0	23	–	2	6¾
53	33	2	6	1000	625	–	–	2	24	–	8	11	0	24	–	2	8
54	33	15	–	2000	1250	–	–	2	25	–	9	–¼	0	25	–	2	9¼
55	34	7	6	3000	1875	–	–	2	26	–	9	1¾	0	26	–	2	10¾
56	35	–	–	4000	2500	–	–	2	27	–	9	3	0	27	–	3	–

12*s*. 9*d*. *per Cwt*.

£12. 15*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	12	9	57	36	6	9	1	–	–	3	2¼	3	–	–	9	6¾
2	1	5	6	58	36	19	6	1	1	–	3	3½	3	1	–	9	8
3	1	18	3	59	37	12	3	1	2	–	3	4¾	3	2	–	9	9½
4	2	11	–	60	38	5	–	1	3	–	3	6¼	3	3	–	9	10¾
5	3	3	9	61	38	17	9	1	4	–	3	7½	3	4	–	10	–
6	3	16	6	62	39	10	6	1	5	–	3	9	3	5	–	10	1½
7	4	9	3	63	40	3	3	1	6	–	3	10¼	3	6	–	10	2¾
8	5	2	–	64	40	16	–	1	7	–	3	11¾	3	7	–	10	4¼
9	5	14	9	65	41	8	9	1	8	–	4	1	3	8	–	10	5½
10	6	7	6	66	42	1	6	1	9	–	4	2½	3	9	–	10	7
11	7	–	3	67	42	14	3	1	10	–	4	3¾	3	10	–	10	8¼
12	7	13	–	68	43	7	–	1	11	–	4	5¼	3	11	–	10	9¾
13	8	5	9	69	43	19	9	1	12	–	4	6½	3	12	–	10	11
14	8	18	6	70	44	12	6	1	13	–	4	8	3	13	–	11	–½
15	9	11	3	71	45	5	3	1	14	–	4	9¼	3	14	–	11	1¾
16	10	4	–	72	45	18	–	1	15	–	4	10½	3	15	–	11	3
17	10	16	9	73	46	10	9	1	16	–	5	–	3	16	–	11	4½
18	11	9	6	74	47	3	6	1	17	–	5	1¼	3	17	–	11	5¾
19	12	2	3	75	47	16	3	1	18	–	5	2¾	3	18	–	11	7¼
20	12	15	–	76	48	9	–	1	19	–	5	4	3	19	–	11	8½
21	13	7	9	77	49	1	9	1	20	–	5	5½	3	20	–	11	10
22	14	–	6	78	49	14	6	1	21	–	5	6¾	3	21	–	11	11¼
23	14	13	3	79	50	7	3	1	22	–	5	8¼	3	22	–	12	–¾
24	15	6	–	80	51	–	–	1	23	–	5	9½	3	23	–	12	2
25	15	18	9	81	51	12	9	1	24	–	5	11	3	24	–	12	3½
26	16	11	6	82	52	5	6	1	25	–	6	–¼	3	25	–	12	4¾
27	17	4	3	83	52	18	3	1	26	–	6	1¾	3	26	–	12	6¼
28	17	17	–	84	53	11	–	1	27	–	6	3	3	27	–	12	7½
29	18	9	9	85	54	3	9	2	—	–	6	4½					
30	19	2	6	86	54	16	6	2	1	–	6	5¾	0	1	–	–	1¼
31	19	15	3	87	55	9	3	2	2	–	6	7	0	2	–	–	2½
32	20	8	–	88	56	2	–	2	3	–	6	8½	0	3	–	–	4
33	21	–	9	89	56	14	9	2	4	–	6	9¾	0	4	–	–	5¼
34	21	13	6	90	57	7	6	2	5	–	6	11¼	0	5	–	–	6¾
35	22	6	3	91	58	–	3	2	6	–	7	–½	0	6	–	–	8
36	22	19	–	92	58	13	–	2	7	–	7	2	0	7	–	–	9½
37	23	11	9	93	59	5	9	2	8	–	7	3¼	0	8	–	–	10¾
38	24	4	6	94	59	18	6	2	9	–	7	4¾	0	9	–	1	–¼
39	24	17	3	95	60	11	3	2	10	–	7	6	0	10	–	1	1½
40	25	10	–	96	61	4	–	2	11	–	7	7½	0	11	–	1	3
41	26	2	9	97	61	16	9	2	12	–	7	8¾	0	12	–	1	4¼
42	26	15	6	98	62	9	6	2	13	–	7	10¼	0	13	–	1	5¾
43	27	8	3	99	63	2	3	2	14	–	7	11½	0	14	–	1	7
44	28	1	–	100	63	15	–	2	15	–	8	–¾	0	15	–	1	8¼
45	28	13	9	200	127	10	–	2	16	–	8	2¼	0	16	–	1	9¾
46	29	6	6	300	191	5	–	2	17	–	8	3½	0	17	–	1	11
47	29	19	3	400	255	–	–	2	18	–	8	5	0	18	–	2	–½
48	30	12	–	500	318	15	–	2	19	–	8	6¼	0	19	–	2	1¾
49	31	4	9	600	382	10	–	2	20	–	8	7¾	0	20	–	2	3¼
50	31	17	6	700	446	5	–	2	21	–	8	9	0	21	–	2	4½
51	32	10	3	800	510	–	–	2	22	–	8	10½	0	22	–	2	6
52	33	3	–	900	573	15	–	2	23	–	8	11¾	0	23	–	2	7¼
53	33	15	9	1000	637	10	–	2	24	–	9	1¼	0	24	–	2	8¾
54	34	8	6	2000	1275	–	–	2	25	–	9	2½	0	25	–	2	10
55	35	1	3	3000	1912	10	–	2	26	–	9	4	0	26	–	2	11½
56	35	14	–	4000	2550	–	–	2	27	–	9	5¼	0	27	–	3	–¾

£13. *per Ton.* **13*s*.** ***per Cwt.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	13	–	57	37	1	–	1	–	–	3	3	3	–	–	9	9
2	1	6	–	58	37	14	–	1	1	–	3	4¼	3	1	–	9	10¼
3	1	19	–	59	38	7	–	1	2	–	3	5¾	3	2	–	9	11¾
4	2	12	–	60	39	–	–	1	3	–	3	7	3	3	–	10	1
5	3	5	–	61	39	13	–	1	4	–	3	8½	3	4	–	10	2½
6	3	18	–	62	40	6	–	1	5	–	3	9¾	3	5	–	10	3¾
7	4	11	–	63	40	19	–	1	6	–	3	11¼	3	6	–	10	5¼
8	5	4	–	64	41	12	–	1	7	–	4	–¾	3	7	–	10	6¾
9	5	17	–	65	42	5	–	1	8	–	4	2	3	8	–	10	8
10	6	10	–	66	42	18	–	1	9	–	4	3½	3	9	–	10	9½
11	7	3	–	67	43	11	–	1	10	–	4	4¾	3	10	–	10	10¾
12	7	16	–	68	44	4	–	1	11	–	4	6¼	3	11	–	11	–¼
13	8	9	–	69	44	17	–	1	12	–	4	7½	3	12	–	11	1½
14	9	2	–	70	45	10	–	1	13	–	4	9	3	13	–	11	3
15	9	15	–	71	46	3	–	1	14	–	4	10½	3	14	–	11	4½
16	10	8	–	72	46	16	–	1	15	–	4	11¾	3	15	–	11	5¾
17	11	1	–	73	47	9	–	1	16	–	5	1¼	3	16	–	11	7¼
18	11	14	–	74	48	2	–	1	17	–	5	2½	3	17	–	11	8½
19	12	7	–	75	48	15	–	1	18	–	5	4	3	18	–	11	10
20	13	–	–	76	49	8	–	1	19	–	5	5¼	3	19	–	11	11¼
21	13	13	–	77	50	1	–	1	20	–	5	6¾	3	20	–	12	–¾
22	14	6	–	78	50	14	–	1	21	–	5	8¼	3	21	–	12	2¼
23	14	19	–	79	51	7	–	1	22	–	5	9½	3	22	–	12	3½
24	15	12	–	80	52	–	–	1	23	–	5	11	3	23	–	12	5
25	16	5	–	81	52	13	–	1	24	–	6	–¼	3	24	–	12	6¼
26	16	18	–	82	53	6	–	1	25	–	6	1¾	3	25	–	12	7¾
27	17	11	–	83	53	19	–	1	26	–	6	3	3	26	–	12	9
28	18	4	–	84	54	12	–	1	27	–	6	4½	3	27	–	12	10½
29	18	17	–	85	55	5	–	2	—	–	6	6					
30	19	10	–	86	55	18	–	2	1	–	6	7¼	0	1	–	–	1¼
31	20	3	–	87	56	11	–	2	2	–	6	8¾	0	2	–	–	2¾
32	20	16	–	88	57	4	–	2	3	–	6	10	0	3	–	–	4
33	21	9	–	89	57	17	–	2	4	–	6	11½	0	4	–	–	5½
34	22	2	–	90	58	10	–	2	5	–	7	–¾	0	5	–	–	6¾
35	22	15	–	91	59	3	–	2	6	–	7	2¼	0	6	–	–	8¼
36	23	8	–	92	59	16	–	2	7	–	7	3¾	0	7	–	–	9¾
37	24	1	–	93	60	9	–	2	8	–	7	5	0	8	–	–	11
38	24	14	–	94	61	2	–	2	9	–	7	6½	0	9	–	1	–½
39	25	7	–	95	61	15	–	2	10	–	7	7¾	0	10	–	1	1¾
40	26	–	–	96	62	8	–	2	11	–	7	9¼	0	11	–	1	3¼
41	26	13	–	97	63	1	–	2	12	–	7	10½	0	12	–	1	4½
42	27	6	–	98	63	14	–	2	13	–	8	–	0	13	–	1	6
43	27	19	–	99	64	7	–	2	14	–	8	1½	0	14	–	1	7½
44	28	12	–	100	65	–	–	2	15	–	8	2¾	0	15	–	1	8¾
45	29	5	–	200	130	–	–	2	16	–	8	4¼	0	16	–	1	10¼
46	29	18	–	300	195	–	–	2	17	–	8	5½	0	17	–	1	11½
47	30	11	–	400	260	–	–	2	18	–	8	7	0	18	–	2	1
48	31	4	–	500	325	–	–	2	19	–	8	8¼	0	19	–	2	2¼
49	31	17	–	600	390	–	–	2	20	–	8	9¾	0	20	–	2	3¾
50	32	10	–	700	455	–	–	2	21	–	8	11¼	0	21	–	2	5¼
51	33	3	–	800	520	–	–	2	22	–	9	–½	0	22	–	2	6½
52	33	16	–	900	585	–	–	2	23	–	9	2	0	23	–	2	8
53	34	9	–	1000	650	–	–	2	24	–	9	3¼	0	24	–	2	9¼
54	35	2	–	2000	1300	–	–	2	25	–	9	4¾	0	25	–	2	10¾
55	35	15	–	3000	1950	–	–	2	26	–	9	6	0	26	–	3	–
56	36	8	–	4000	2600	–	–	2	27	–	9	7½	0	27	–	3	1½

13s. 3d. per Cwt.

£13. 5s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	13	3	57	37	15	3	1	–	–	3	3¾	3	–	–	9	11¼
2	1	6	6	58	38	8	6	1	1	–	3	5	3	1	–	10	–½
3	1	19	9	59	39	1	9	1	2	–	3	6½	3	2	–	10	2
4	2	13	–	60	39	15	–	1	3	–	3	8	3	3	–	10	3½
5	3	6	3	61	40	8	3	1	4	–	3	9¼	3	4	–	10	4¾
6	3	19	6	62	41	1	6	1	5	–	3	10¾	3	5	–	10	6¼
7	4	12	9	63	41	14	9	1	6	–	4	–¼	3	6	–	10	7¾
8	5	6	–	64	42	8	–	1	7	–	4	1½	3	7	–	10	9
9	5	19	3	65	43	1	3	1	8	–	4	3	3	8	–	10	10½
10	6	12	6	66	43	14	6	1	9	–	4	4½	3	9	–	11	–
11	7	5	9	67	44	7	9	1	10	–	4	5¾	3	10	–	11	1¼
12	7	19	–	68	45	1	–	1	11	–	4	7¼	3	11	–	11	2¾
13	8	12	3	69	45	14	3	1	12	–	4	8¾	3	12	–	11	4¼
14	9	5	6	70	46	7	6	1	13	–	4	10	3	13	–	11	5½
15	9	18	9	71	47	–	9	1	14	–	4	11½	3	14	–	11	7
16	10	12	–	72	47	14	–	1	15	–	5	1	3	15	–	11	8½
17	11	5	3	73	48	7	3	1	16	–	5	2¼	3	16	–	11	9¾
18	11	18	6	74	49	–	6	1	17	–	5	3¾	3	17	–	11	11¼
19	12	11	9	75	49	13	9	1	18	–	5	5¼	3	18	–	12	–¾
20	13	5	–	76	50	7	–	1	19	–	5	6½	3	19	–	12	2
21	13	18	3	77	51	–	3	1	20	–	5	8	3	20	–	12	3½
22	14	11	6	78	51	13	6	1	21	–	5	9½	3	21	–	12	5
23	15	4	9	79	52	6	9	1	22	–	5	10¾	3	22	–	12	6¼
24	15	18	–	80	53	–	–	1	23	–	6	–¼	3	23	–	12	7¾
25	16	11	3	81	53	13	3	1	24	–	6	1¾	3	24	–	12	9¼
26	17	4	6	82	54	6	6	1	25	–	6	3	3	25	–	12	10½
27	17	17	9	83	54	19	9	1	26	–	6	4½	3	26	–	13	–
28	18	11	–	84	55	13	–	1	27	–	6	6	3	27	–	13	1½
29	19	4	3	85	56	6	3	2	—	–	6	7½					
30	19	17	6	86	56	19	6	2	1	–	6	8¾	0	1	–	–	1¼
31	20	10	9	87	57	12	9	2	2	–	6	10¼	0	2	–	–	2¾
32	21	4	–	88	58	6	–	2	3	–	6	11¾	0	3	–	–	4¼
33	21	17	3	89	58	19	3	2	4	–	7	1	0	4	–	–	5½
34	22	10	6	90	59	12	6	2	5	–	7	2½	0	5	–	–	7
35	23	3	9	91	60	5	9	2	6	–	7	4	0	6	–	–	8½
36	23	17	–	92	60	19	–	2	7	–	7	5¼	0	7	–	–	9¾
37	24	10	3	93	61	12	3	2	8	–	7	6¾	0	8	–	–	11¼
38	25	3	6	94	62	5	6	2	9	–	7	8¼	0	9	–	1	–¾
39	25	16	9	95	62	18	9	2	10	–	7	9½	0	10	–	1	2
40	26	10	–	96	63	12	–	2	11	–	7	11	0	11	–	1	3½
41	27	3	3	97	64	5	3	2	12	–	8	–½	0	12	–	1	5
42	27	16	6	98	64	18	6	2	13	–	8	1¾	0	13	–	1	6¼
43	28	9	9	99	65	11	9	2	14	–	8	3¼	0	14	–	1	7¾
44	29	3	–	100	66	5	–	2	15	–	8	4¾	0	15	–	1	9¼
45	29	16	3	200	132	10	–	2	16	–	8	6	0	16	–	1	10½
46	30	9	6	300	198	15	–	2	17	–	8	7½	0	17	–	2	–
47	31	2	9	400	265	–	–	2	18	–	8	9	0	18	–	2	1½
48	31	16	–	500	331	5	–	2	19	–	8	10¼	0	19	–	2	2¾
49	32	9	3	600	397	10	–	2	20	–	8	11¾	0	20	–	2	4¼
50	33	2	6	700	463	15	–	2	21	–	9	1¼	0	21	–	2	5¾
51	33	15	9	800	530	–	–	2	22	–	9	2½	0	22	–	2	7
52	34	9	–	900	596	5	–	2	23	–	9	4	0	23	–	2	8½
53	35	2	3	1000	662	10	–	2	24	–	9	5½	0	24	–	2	10
54	35	15	6	2000	1325	–	–	2	25	–	9	6¾	0	25	–	2	11¼
55	36	8	9	3000	1987	10	–	2	26	–	9	8¼	0	26	–	3	–¾
56	37	2	–	4000	2650	–	–	2	27	–	9	9¾	0	27	–	3	2¼

£13. 10s. per Ton. 13s. 6d. per Cwt.

Cwt.	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	13	6	57	38	9	6	1	-	-	3	4½	3	-	-	10	1½
2	1	7	-	58	39	3	-	1	1	-	3	5¾	3	1	-	10	2¾
3	2	-	6	59	39	16	6	1	2	-	3	7¼	3	2	-	10	4¼
4	2	14	-	60	40	10	-	1	3	-	3	8¾	3	3	-	10	5¾
5	3	7	6	61	41	3	6	1	4	-	3	10¼	3	4	-	10	7¼
6	4	1	-	62	41	17	-	1	5	-	3	11½	3	5	-	10	8½
7	4	14	6	63	42	10	6	1	6	-	4	1	3	6	-	10	10
8	5	8	-	64	43	4	-	1	7	-	4	2½	3	7	-	10	11½
9	6	1	6	65	43	17	6	1	8	-	4	4	3	8	-	11	1
10	6	15	-	66	44	11	-	1	9	-	4	5½	3	9	-	11	2½
11	7	8	6	67	45	4	6	1	10	-	4	6¾	3	10	-	11	3¾
12	8	2	-	68	45	18	-	1	11	-	4	8¼	3	11	-	11	5¼
13	8	15	6	69	46	11	6	1	12	-	4	9¾	3	12	-	11	6¾
14	9	9	-	70	47	5	-	1	13	-	4	11¼	3	13	-	11	8¼
15	10	2	6	71	47	18	6	1	14	-	5	-¾	3	14	-	11	9¾
16	10	16	-	72	48	12	-	1	15	-	5	2	3	15	-	11	11
17	11	9	6	73	49	5	6	1	16	-	5	3½	3	16	-	12	-½
18	12	3	-	74	49	19	-	1	17	-	5	5	3	17	-	12	2
19	12	16	6	75	50	12	6	1	18	-	5	6½	3	18	-	12	3½
20	13	10	-	76	51	6	-	1	19	-	5	7¾	3	19	-	12	4¾
21	14	3	6	77	51	19	6	1	20	-	5	9¼	3	20	-	12	6¼
22	14	17	-	78	52	13	-	1	21	-	5	10¾	3	21	-	12	7¾
23	15	10	6	79	53	6	6	1	22	-	6	-¼	3	22	-	12	9¼
24	16	4	-	80	54	-	-	1	23	-	6	1¾	3	23	-	12	10¾
25	16	17	6	81	54	13	6	1	24	-	6	3	3	24	-	13	-
26	17	11	-	82	55	7	-	1	25	-	6	4½	3	25	-	13	1½
27	18	4	6	83	56	-	6	1	26	-	6	6	3	26	-	13	3
28	18	18	-	84	56	14	-	1	27	-	6	7½	3	27	-	13	4½
29	19	11	6	85	57	7	6	2	—	-	6	9					
30	20	5	-	86	58	1	-	2	1	-	6	10¼	0	1	-	-	1¼
31	20	18	6	87	58	14	6	2	2	-	6	11¾	0	2	-	-	2¾
32	21	12	-	88	59	8	-	2	3	-	7	1¼	0	3	-	-	4¼
33	22	5	6	89	60	1	6	2	4	-	7	2¾	0	4	-	-	5¾
34	22	19	-	90	60	15	-	2	5	-	7	4	0	5	-	-	7
35	23	12	6	91	61	8	6	2	6	-	7	5½	0	6	-	-	8½
36	24	6	-	92	62	2	-	2	7	-	7	7	0	7	-	-	10
37	24	19	6	93	62	15	6	2	8	-	7	8½	0	8	-	-	11½
38	25	13	-	94	63	9	-	2	9	-	7	10	0	9	-	1	1
39	26	6	6	95	64	2	6	2	10	-	7	11¼	0	10	-	1	2¼
40	27	-	-	96	64	16	-	2	11	-	8	-¾	0	11	-	1	3¾
41	27	13	6	97	65	9	6	2	12	-	8	2¼	0	12	-	1	5¼
42	28	7	-	98	66	3	-	2	13	-	8	3¾	0	13	-	1	6¾
43	29	-	6	99	66	16	6	2	14	-	8	5¼	0	14	-	1	8¼
44	29	14	-	100	67	10	-	2	15	-	8	6½	0	15	-	1	9½
45	30	7	6	200	135	-	-	2	16	-	8	8	0	16	-	1	11
46	31	1	-	300	202	10	-	2	17	-	8	9½	0	17	-	2	-½
47	31	14	6	400	270	-	-	2	18	-	8	11	0	18	-	2	2
48	32	8	-	500	337	10	-	2	19	-	9	-¼	0	19	-	2	3¼
49	33	1	6	600	405	-	-	2	20	-	9	1¾	0	20	-	2	4¾
50	33	15	-	700	472	10	-	2	21	-	9	3¼	0	21	-	2	6¼
51	34	8	6	800	540	-	-	2	22	-	9	4¾	0	22	-	2	7¾
52	35	2	-	900	607	10	-	2	23	-	9	6¼	0	23	-	2	9¼
53	35	15	6	1000	675	-	-	2	24	-	9	7½	0	24	-	2	10½
54	36	9	-	2000	1350	-	-	2	25	-	9	9	0	25	-	3	-
55	37	2	6	3000	2025	-	-	2	26	-	9	10½	0	26	-	3	1½
56	37	16	-	4000	2700	-	-	2	27	-	10	-	0	27	-	3	3

13*s*. 9*d*. *per Cwt*. £13. 15*s*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	13	9	57	39	3	9	1	–	–	3	5¼	3	–	–	10	3¾
2	1	7	6	58	39	17	6	1	1	–	3	6½	3	1	–	10	5
3	2	1	3	59	40	11	3	1	2	–	3	8	3	2	–	10	6½
4	2	15	–	60	41	5	–	1	3	–	3	9½	3	3	–	10	8
5	3	8	9	61	41	18	9	1	4	–	3	11	3	4	–	10	9½
6	4	2	6	62	42	12	6	1	5	–	4	–½	3	5	–	10	11
7	4	16	3	63	43	6	3	1	6	–	4	2	3	6	–	11	–½
8	5	10	–	64	44	–	–	1	7	–	4	3½	3	7	–	11	2
9	6	3	9	65	44	13	9	1	8	–	4	5	3	8	–	11	3½
10	6	17	6	66	45	7	6	1	9	–	4	6½	3	9	–	11	5
11	7	11	3	67	46	1	3	1	10	–	4	7¾	3	10	–	11	6¼
12	8	5	–	68	46	15	–	1	11	–	4	9¼	3	11	–	11	7¾
13	8	18	9	69	47	8	9	1	12	–	4	10¾	3	12	–	11	9¼
14	9	12	6	70	48	2	6	1	13	–	5	–¼	3	13	–	11	10¾
15	10	6	3	71	48	16	3	1	14	–	5	1¾	3	14	–	12	–¼
16	11	–	–	72	49	10	–	1	15	–	5	3¼	3	15	–	12	1¾
17	11	13	9	73	50	3	9	1	16	–	5	4¾	3	16	–	12	3¼
18	12	7	6	74	50	17	6	1	17	–	5	6¼	3	17	–	12	4¾
19	13	1	3	75	51	11	3	1	18	–	5	7¾	3	18	–	12	6¼
20	13	15	–	76	52	5	–	1	19	–	5	9	3	19	–	12	7½
21	14	8	9	77	52	18	9	1	20	–	5	10½	3	20	–	12	9
22	15	2	6	78	53	12	6	1	21	–	6	–	3	21	–	12	10½
23	15	16	3	79	54	6	3	1	22	–	6	1½	3	22	–	13	–
24	16	10	–	80	55	–	–	1	23	–	6	3	3	23	–	13	1½
25	17	3	9	81	55	13	9	1	24	–	6	4½	3	24	–	13	3
26	17	17	6	82	56	7	6	1	25	–	6	6	3	25	–	13	4½
27	18	11	3	83	57	1	3	1	26	–	6	7½	3	26	–	13	6
28	19	5	–	84	57	15	–	1	27	–	6	9	3	27	–	13	7½
29	19	18	9	85	58	8	9	2	—	–	6	10½					
30	20	12	6	86	59	2	6	2	1	–	6	11¾	0	1	–	–	1¼
31	21	6	3	87	59	16	3	2	2	–	7	1¼	0	2	–	–	2¾
32	22	–	–	88	60	10	–	2	3	–	7	2¾	0	3	–	–	4¼
33	22	13	9	89	61	3	9	2	4	–	7	4¼	0	4	–	–	5¾
34	23	7	6	90	61	17	6	2	5	–	7	5¾	0	5	–	–	7¼
35	24	1	3	91	62	11	3	2	6	–	7	7¼	0	6	–	–	8¾
36	24	15	–	92	63	5	–	2	7	–	7	8¾	0	7	–	–	10¼
37	25	8	9	93	63	18	9	2	8	–	7	10¼	0	8	–	–	11¾
38	26	2	6	94	64	12	6	2	9	–	7	11¾	0	9	–	1	1¼
39	26	16	3	95	65	6	3	2	10	–	8	1	0	10	–	1	2½
40	27	10	–	96	66	–	–	2	11	–	8	2½	0	11	–	1	4
41	28	3	9	97	66	13	9	2	12	–	8	4	0	12	–	1	5½
42	28	17	6	98	67	7	6	2	13	–	8	5½	0	13	–	1	7
43	29	11	3	99	68	1	3	2	14	–	8	7	0	14	–	1	8½
44	30	5	–	100	68	15	–	2	15	–	8	8½	0	15	–	1	10
45	30	18	9	200	137	10	–	2	16	–	8	10	0	16	–	1	11½
46	31	12	6	300	206	5	–	2	17	–	8	11½	0	17	–	2	1
47	32	6	3	400	275	–	–	2	18	–	9	1	0	18	–	2	2½
48	33	–	–	500	343	15	–	2	19	–	9	2¼	0	19	–	2	3¾
49	33	13	9	600	412	10	–	2	20	–	9	3¾	0	20	–	2	5¼
50	34	7	6	700	481	5	–	2	21	–	9	5¼	0	21	–	2	6¾
51	35	1	3	800	550	–	–	2	22	–	9	6¾	0	22	–	2	8¼
52	35	15	–	900	618	15	–	2	23	–	9	8¼	0	23	–	2	9¾
53	36	8	9	1000	687	10	–	2	24	–	9	9¾	0	24	–	2	11¼
54	37	2	6	2000	1375	–	–	2	25	–	9	11¼	0	25	–	3	–¾
55	37	16	3	3000	2062	10	–	2	26	–	10	–¾	0	26	–	3	2¼
56	38	10	–	4000	2750	–	–	2	27	–	10	2¼	0	27	–	3	3¾

£14. per Ton. 1½*d. per lb.* 14*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	14	–	57	39	18	–	1	–	–	3	6	3	–	–	10	6
2	1	8	–	58	40	12	–	1	1	–	3	7½	3	1	–	10	7½
3	2	2	–	59	41	6	–	1	2	–	3	9	3	2	–	10	9
4	2	16	–	60	42	–	–	1	3	–	3	10½	3	3	–	10	10½
5	3	10	–	61	42	14	–	1	4	–	4	–	3	4	–	11	–
6	4	4	–	62	43	8	–	1	5	–	4	1½	3	5	–	11	1½
7	4	18	–	63	44	2	–	1	6	–	4	3	3	6	–	11	3
8	5	12	–	64	44	16	–	1	7	–	4	4½	3	7	–	11	4½
9	6	6	–	65	45	10	–	1	8	–	4	6	3	8	–	11	6
10	7	–	–	66	46	4	–	1	9	–	4	7½	3	9	–	11	7½
11	7	14	–	67	46	18	–	1	10	–	4	9	3	10	–	11	9
12	8	8	–	68	47	12	–	1	11	–	4	10½	3	11	–	11	10½
13	9	2	–	69	48	6	–	1	12	–	5	–	3	12	–	12	–
14	9	16	–	70	49	–	–	1	13	–	5	1½	3	13	–	12	1½
15	10	10	–	71	49	14	–	1	14	–	5	3	3	14	–	12	3
16	11	4	–	72	50	8	–	1	15	–	5	4½	3	15	–	12	4½
17	11	18	–	73	51	2	–	1	16	–	5	6	3	16	–	12	6
18	12	12	–	74	51	16	–	1	17	–	5	7½	3	17	–	12	7½
19	13	6	–	75	52	10	–	1	18	–	5	9	3	18	–	12	9
20	14	–	–	76	53	4	–	1	19	–	5	10½	3	19	–	12	10½
21	14	14	–	77	53	18	–	1	20	–	6	–	3	20	–	13	–
22	15	8	–	78	54	12	–	1	21	–	6	1½	3	21	–	13	1½
23	16	2	–	79	55	6	–	1	22	–	6	3	3	22	–	13	3
24	16	16	–	80	56	–	–	1	23	–	6	4½	3	23	–	13	4½
25	17	10	–	81	56	14	–	1	24	–	6	6	3	24	–	13	6
26	18	4	–	82	57	8	–	1	25	–	6	7½	3	25	–	13	7½
27	18	18	–	83	58	2	–	1	26	–	6	9	3	26	–	13	9
28	19	12	–	84	58	16	–	1	27	–	6	10½	3	27	–	13	10½
29	20	6	–	85	59	10	–	2	—	–	7	–					
30	21	–	–	86	60	4	–	2	1	–	7	1½	0	1	–	–	1½
31	21	14	–	87	60	18	–	2	2	–	7	3	0	2	–	–	3
32	22	8	–	88	61	12	–	2	3	–	7	4½	0	3	–	–	4½
33	23	2	–	89	62	6	–	2	4	–	7	6	0	4	–	–	6
34	23	16	–	90	63	–	–	2	5	–	7	7½	0	5	–	–	7½
35	24	10	–	91	63	14	–	2	6	–	7	9	0	6	–	–	9
36	25	4	–	92	64	8	–	2	7	–	7	10½	0	7	–	–	10½
37	25	18	–	93	65	2	–	2	8	–	8	–	0	8	–	1	–
38	26	12	–	94	65	16	–	2	9	–	8	1½	0	9	–	1	1½
39	27	6	–	95	66	10	–	2	10	–	8	3	0	10	–	1	3
40	28	–	–	96	67	4	–	2	11	–	8	4½	0	11	–	1	4½
41	28	14	–	97	67	18	–	2	12	–	8	6	0	12	–	1	6
42	29	8	–	98	68	12	–	2	13	–	8	7½	0	13	–	1	7½
43	30	2	–	99	69	6	–	2	14	–	8	9	0	14	–	1	9
44	30	16	–	100	70	–	–	2	15	–	8	10½	0	15	–	1	10½
45	31	10	–	200	140	–	–	2	16	–	9	–	0	16	–	2	–
46	32	4	–	300	210	–	–	2	17	–	9	1½	0	17	–	2	1½
47	32	18	–	400	280	–	–	2	18	–	9	3	0	18	–	2	3
48	33	12	–	500	350	–	–	2	19	–	9	4½	0	19	–	2	4½
49	34	6	–	600	420	–	–	2	20	–	9	6	0	20	–	2	6
50	35	–	–	700	490	–	–	2	21	–	9	7½	0	21	–	2	7½
51	35	14	–	800	560	–	–	2	22	–	9	9	0	22	–	2	9
52	36	8	–	900	630	–	–	2	23	–	9	10½	0	23	–	2	10½
53	37	2	–	1000	700	–	–	2	24	–	10	–	0	24	–	3	–
54	37	16	–	2000	1400	–	–	2	25	–	10	1½	0	25	–	3	1½
55	38	10	–	3000	2100	–	–	2	26	–	10	3	0	26	–	3	3
56	39	4	–	4000	2800	–	–	2	27	–	10	4½	0	27	–	3	4½

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	14	3	57	40	12	3	1	–	–	3	6¾	3	–	–	10	8¼
2	1	8	6	58	41	6	6	1	1	–	3	8¼	3	1	–	10	9¾
3	2	2	9	59	42	–	9	1	2	–	3	9¾	3	2	–	10	11¼
4	2	17	–	60	42	15	–	1	3	–	3	11¼	3	3	–	11	–¾
5	3	11	3	61	43	9	3	1	4	–	4	–¾	3	4	–	11	2¼
6	4	5	6	62	44	3	6	1	5	–	4	2¼	3	5	–	11	3¾
7	4	19	9	63	44	17	9	1	6	–	4	3¾	3	6	–	11	5¼
8	5	14	–	64	45	12	–	1	7	–	4	5¼	3	7	–	11	6¾
9	6	8	3	65	46	6	3	1	8	–	4	6¾	3	8	–	11	8¼
10	7	2	6	66	47	–	6	1	9	–	4	8¼	3	9	–	11	9¾
11	7	16	9	67	47	14	9	1	10	–	4	10	3	10	–	11	11½
12	8	11	–	68	48	9	–	1	11	–	4	11½	3	11	–	12	1
13	9	5	3	69	49	3	3	1	12	–	5	1	3	12	–	12	2½
14	9	19	6	70	49	17	6	1	13	–	5	2½	3	13	–	12	4
15	10	13	9	71	50	11	9	1	14	–	5	4	3	14	–	12	5½
16	11	8	–	72	51	6	–	1	15	–	5	5½	3	15	–	12	7
17	12	2	3	73	52	–	3	1	16	–	5	7	3	16	–	12	8½
18	12	16	6	74	52	14	6	1	17	–	5	8½	3	17	–	12	10
19	13	10	9	75	53	8	9	1	18	–	5	10	3	18	–	12	11½
20	14	5	–	76	54	3	–	1	19	–	5	11¾	3	19	–	13	1¼
21	14	19	3	77	54	17	3	1	20	–	6	1¼	3	20	–	13	2¾
22	15	13	6	78	55	11	6	1	21	–	6	2¾	3	21	–	13	4¼
23	16	7	9	79	56	5	9	1	22	–	6	4¼	3	22	–	13	5¾
24	17	2	–	80	57	–	–	1	23	–	6	5¾	3	23	–	13	7¼
25	17	16	3	81	57	14	3	1	24	–	6	7¼	3	24	–	13	8¾
26	18	10	6	82	58	8	6	1	25	–	6	8¾	3	25	–	13	10¼
27	19	4	9	83	59	2	9	1	26	–	6	10¼	3	26	–	13	11¾
28	19	19	–	84	59	17	–	1	27	–	6	11¾	3	27	–	14	1¼
29	20	13	3	85	60	11	3	2	—	–	7	1½					
30	21	7	6	86	61	5	6	2	1	–	7	3	0	1	–	–	1½
31	22	1	9	87	61	19	9	2	2	–	7	4½	0	2	–	–	3
32	22	16	–	88	62	14	–	2	3	–	7	6	0	3	–	–	4½
33	23	10	3	89	63	8	3	2	4	–	7	7½	0	4	–	–	6
34	24	4	6	90	64	2	6	2	5	–	7	9	0	5	–	–	7½
35	24	18	9	91	64	16	9	2	6	–	7	10½	0	6	–	–	9
36	25	13	–	92	65	11	–	2	7	–	8	–	0	7	–	–	10½
37	26	7	3	93	66	5	3	2	8	–	8	1½	0	8	–	1	–
38	27	1	6	94	66	19	6	2	9	–	8	3	0	9	–	1	1½
39	27	15	9	95	67	13	9	2	10	–	8	4¾	0	10	–	1	3¼
40	28	10	–	96	68	8	–	2	11	–	8	6¼	0	11	–	1	4¾
41	29	4	3	97	69	2	3	2	12	–	8	7¾	0	12	–	1	6¼
42	29	18	6	98	69	16	6	2	13	–	8	9¼	0	13	–	1	7¾
43	30	12	9	99	70	10	9	2	14	–	8	10¾	0	14	–	1	9¼
44	31	7	–	100	71	5	–	2	15	–	9	–¼	0	15	–	1	10¾
45	32	1	3	200	142	10	–	2	16	–	9	1¾	0	16	–	2	–¼
46	32	15	6	300	213	15	–	2	17	–	9	3¼	0	17	–	2	1¾
47	33	9	9	400	285	–	–	2	18	–	9	4¾	0	18	–	2	3¼
48	34	4	–	500	356	5	–	2	19	–	9	6½	0	19	–	2	5
49	34	18	3	600	427	10	–	2	20	–	9	8	0	20	–	2	6½
50	35	12	6	700	498	15	–	2	21	–	9	9½	0	21	–	2	8
51	36	6	9	800	570	–	–	2	22	–	9	11	0	22	–	2	9½
52	37	1	–	900	641	5	–	2	23	–	10	–½	0	23	–	2	11
53	37	15	3	1000	712	10	–	2	24	–	10	2	0	24	–	3	–½
54	38	9	6	2000	1425	–	–	2	25	–	10	3½	0	25	–	3	2
55	39	3	9	3000	2137	10	–	2	26	–	10	5	0	26	–	3	3½
56	39	18	–	4000	2850	–	–	2	27	–	10	6½	0	27	–	3	5

£14. 10s. per Ton.

14s. 6d. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.
1	–	14	6	57	41	6	6
2	1	9	–	58	42	1	–
3	2	3	6	59	42	15	6
4	2	18	–	60	43	10	–
5	3	12	6	61	44	4	6
6	4	7	–	62	44	19	–
7	5	1	6	63	45	13	6
8	5	16	–	64	46	8	–
9	6	10	6	65	47	2	6
10	7	5	–	66	47	17	–
11	7	19	6	67	48	11	6
12	8	14	–	68	49	6	–
13	9	8	6	69	50	–	6
14	10	3	–	70	50	15	–
15	10	17	6	71	51	9	6
16	11	12	–	72	52	4	–
17	12	6	6	73	52	18	6
18	13	1	–	74	53	13	–
19	13	15	6	75	54	7	6
20	14	10	–	76	55	2	–
21	15	4	6	77	55	16	6
22	15	19	–	78	56	11	–
23	16	13	6	79	57	5	6
24	17	8	–	80	58	–	–
25	18	2	6	81	58	14	6
26	18	17	–	82	59	9	–
27	19	11	6	83	60	3	6
28	20	6	–	84	60	18	–
29	21	–	6	85	61	12	6
30	21	15	–	86	62	7	–
31	22	9	6	87	63	1	6
32	23	4	–	88	63	16	–
33	23	18	6	89	64	10	6
34	24	13	–	90	65	5	–
35	25	7	6	91	65	19	6
36	26	2	–	92	66	14	–
37	26	16	6	93	67	8	6
38	27	11	–	94	68	3	–
39	28	5	6	95	68	17	6
40	29	–	–	96	69	12	–
41	29	14	6	97	70	6	6
42	30	9	–	98	71	1	–
43	31	3	6	99	71	15	6
44	31	18	–	100	72	10	–
45	32	12	6	200	145	–	–
46	33	7	–	300	217	10	–
47	34	1	6	400	290	–	–
48	34	16	–	500	362	10	–
49	35	10	6	600	435	–	–
50	36	5	–	700	507	10	–
51	36	19	6	800	580	–	–
52	37	14	–	900	652	10	–
53	38	8	6	1000	725	–	–
54	39	3	–	2000	1450	–	–
55	39	17	6	3000	2175	–	–
56	40	12	–	4000	2900	–	–

qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	–	3	7½	3	–	–	10	10½
1	1	–	3	9	3	1	–	11	–
1	2	–	3	10½	3	2	–	11	1½
1	3	–	4	–	3	3	–	11	3
1	4	–	4	1½	3	4	–	11	4½
1	5	–	4	3¼	3	5	–	11	6¼
1	6	–	4	4¾	3	6	–	11	7¾
1	7	–	4	6¼	3	7	–	11	9¼
1	8	–	4	7¾	3	8	–	11	10¾
1	9	–	4	9¼	3	9	–	12	–¼
1	10	–	4	11	3	10	–	12	2
1	11	–	5	–½	3	11	–	12	3½
1	12	–	5	2	3	12	–	12	5
1	13	–	5	3½	3	13	–	12	6½
1	14	–	5	5¼	3	14	–	12	8¼
1	15	–	5	6¾	3	15	–	12	9¾
1	16	–	5	8¼	3	16	–	12	11¼
1	17	–	5	9¾	3	17	–	13	–¾
1	18	–	5	11¼	3	18	–	13	2¼
1	19	–	6	1	3	19	–	13	4
1	20	–	6	2½	3	20	–	13	5½
1	21	–	6	4	3	21	–	13	7
1	22	–	6	5½	3	22	–	13	8½
1	23	–	6	7	3	23	–	13	10
1	24	–	6	8¾	3	24	–	13	11¾
1	25	–	6	10¼	3	25	–	14	1¼
1	26	–	6	11¾	3	26	–	14	2¾
1	27	–	7	1¼	3	27	–	14	4¼
2	—	–	7	3					
2	1	–	7	4½	0	1	–	–	1½
2	2	–	7	6	0	2	–	–	3
2	3	–	7	7½	0	3	–	–	4½
2	4	–	7	9	0	4	–	–	6
2	5	–	7	10¾	0	5	–	–	7¾
2	6	–	8	–¼	0	6	–	–	9¼
2	7	–	8	1¾	0	7	–	–	10¾
2	8	–	8	3¼	0	8	–	1	–¼
2	9	–	8	4¾	0	9	–	1	1¾
2	10	–	8	6½	0	10	–	1	3½
2	11	–	8	8	0	11	–	1	5
2	12	–	8	9½	0	12	–	1	6½
2	13	–	8	11	0	13	–	1	8
2	14	–	9	–¾	0	14	–	1	9¾
2	15	–	9	2¼	0	15	–	1	11¼
2	16	–	9	3¾	0	16	–	2	–¾
2	17	–	9	5¼	0	17	–	2	2¼
2	18	–	9	6¾	0	18	–	2	3¾
2	19	–	9	8½	0	19	–	2	5½
2	20	–	9	10	0	20	–	2	7
2	21	–	9	11½	0	21	–	2	8½
2	22	–	10	1	0	22	–	2	10
2	23	–	10	2½	0	23	–	2	11½
2	24	–	10	4¼	0	24	–	3	1¼
2	25	–	10	5¾	0	25	–	3	2¾
2	26	–	10	7¼	0	26	–	3	4
2	27	–	10	8¾	0	27	–	3	

14*s*. 9*d*. *per Cwt*.

£14. 15*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	14	9	57	42	–	9	1	–	–	3	8¼	3	–	–	11	–¾
2	1	9	6	58	42	15	6	1	1	–	3	9¾	3	1	–	11	2¼
3	2	4	3	59	43	10	3	1	2	–	3	11¼	3	2	–	11	3¾
4	2	19	–	60	44	5	–	1	3	–	4	–¾	3	3	–	11	5¼
5	3	13	9	61	44	19	9	1	4	–	4	2½	3	4	–	11	7
6	4	8	6	62	45	14	6	1	5	–	4	4	3	5	–	11	8½
7	5	3	3	63	46	9	3	1	6	–	4	5½	3	6	–	11	10
8	5	18	–	64	47	4	–	1	7	–	4	7¼	3	7	–	11	11¾
9	6	12	9	65	47	18	9	1	8	–	4	8¾	3	8	–	12	1¼
10	7	7	6	66	48	13	6	1	9	–	4	10¼	3	9	–	12	2¾
11	8	2	3	67	49	8	3	1	10	–	5	–	3	10	–	12	4½
12	8	17	–	68	50	3	–	1	11	–	5	1½	3	11	–	12	6
13	9	11	9	69	50	17	9	1	12	–	5	3	3	12	–	12	7½
14	10	6	6	70	51	12	6	1	13	–	5	4¾	3	13	–	12	9¼
15	11	1	3	71	52	7	3	1	14	–	5	6¼	3	14	–	12	10¾
16	11	16	–	72	53	2	–	1	15	–	5	7¾	3	15	–	13	–¼
17	12	10	9	73	53	16	9	1	16	–	5	9½	3	16	–	13	2
18	13	5	6	74	54	11	6	1	17	–	5	11	3	17	–	13	3½
19	14	–	3	75	55	6	3	1	18	–	6	–½	3	18	–	13	5
20	14	15	–	76	56	1	–	1	19	–	6	2¼	3	19	–	13	6¾
21	15	9	9	77	56	15	9	1	20	–	6	3¾	3	20	–	13	8¼
22	16	4	6	78	57	10	6	1	21	–	6	5¼	3	21	–	13	9¾
23	16	19	3	79	58	5	3	1	22	–	6	7	3	22	–	13	11½
24	17	14	–	80	59	–	–	1	23	–	6	8½	3	23	–	14	1
25	18	8	9	81	59	14	9	1	24	–	6	10	3	24	–	14	2½
26	19	3	6	82	60	9	6	1	25	–	6	11¾	3	25	–	14	4¼
27	19	18	3	83	61	4	3	1	26	–	7	1½	3	26	–	14	5¾
28	20	13	–	84	61	19	–	1	27	–	7	2¾	3	27	–	14	7¼
29	21	7	9	85	62	13	9	2	—	–	7	4½					
30	22	2	6	86	63	8	6	2	1	–	7	6	0	1	–	–	1½
31	22	17	3	87	64	3	3	2	2	–	7	7½	0	2	–	–	3
32	23	12	–	88	64	18	–	2	3	–	7	9	0	3	–	–	4½
33	24	6	9	89	65	12	9	2	4	–	7	10¾	0	4	–	–	6¼
34	25	1	6	90	66	7	6	2	5	–	8	–¼	0	5	–	–	7¾
35	25	16	3	91	67	2	3	2	6	–	8	1¾	0	6	–	–	9¼
36	26	11	–	92	67	17	–	2	7	–	8	3½	0	7	–	–	11
37	27	5	9	93	68	11	9	2	8	–	8	5	0	8	–	1	–½
38	28	–	6	94	69	6	6	2	9	–	8	6½	0	9	–	1	2
39	28	15	3	95	70	1	3	2	10	–	8	8¼	0	10	–	1	3¾
40	29	10	–	96	70	16	–	2	11	–	8	9¾	0	11	–	1	5¼
41	30	4	9	97	71	10	9	2	12	–	8	11¼	0	12	–	1	6¾
42	30	19	6	98	72	5	6	2	13	–	9	1	0	13	–	1	8½
43	31	14	3	99	73	–	3	2	14	–	9	2½	0	14	–	1	10
44	32	9	–	100	73	15	–	2	15	–	9	4	0	15	–	1	11½
45	33	3	9	200	147	10	–	2	16	–	9	5¾	0	16	–	2	1¼
46	33	18	6	300	221	5	–	2	17	–	9	7¼	0	17	–	2	2¾
47	34	13	3	400	295	–	–	2	18	–	9	8¾	0	18	–	2	4¼
48	35	8	–	500	368	15	–	2	19	–	9	10½	0	19	–	2	6
49	36	2	9	600	442	10	–	2	20	–	10	–	0	20	–	2	7½
50	36	17	6	700	516	5	–	2	21	–	10	1½	0	21	–	2	9
51	37	12	3	800	590	–	–	2	22	–	10	3¼	0	22	–	2	10¾
52	38	7	–	900	663	15	–	2	23	–	10	4¾	0	23	–	3	–¼
53	39	1	9	1000	737	10	–	2	24	–	10	6¼	0	24	–	3	1¾
54	39	16	6	2000	1475	–	–	2	25	–	10	8	0	25	–	3	3½
55	40	11	3	3000	2212	10	–	2	26	–	10	9½	0	26	–	3	5
56	41	6	–	4000	2950	–	–	2	27	–	10	11	0	27	–	3	6½

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	15	–	57	42	15	–	1	–	–	3	9	3	–	–	11	3
2	1	10	–	58	43	10	–	1	1	–	3	10½	3	1	–	11	4½
3	2	5	–	59	44	5	–	1	2	–	4	–	3	2	–	11	6
4	3	–	–	60	45	–	–	1	3	–	4	1¾	3	3	–	11	7¾
5	3	15	–	61	45	15	–	1	4	–	4	3¼	3	4	–	11	9¼
6	4	10	–	62	46	10	–	1	5	–	4	5	3	5	–	11	11
7	5	5	–	63	47	5	–	1	6	–	4	6½	3	6	–	12	–½
8	6	–	–	64	48	–	–	1	7	–	4	8¼	3	7	–	12	2¼
9	6	15	–	65	48	15	–	1	8	–	4	9¾	3	8	–	12	3¾
10	7	10	–	66	49	10	–	1	9	–	4	11¼	3	9	–	12	5¼
11	8	5	–	67	50	5	–	1	10	–	5	1	3	10	–	12	7
12	9	–	–	68	51	–	–	1	11	–	5	2½	3	11	–	12	8½
13	9	15	–	69	51	15	–	1	12	–	5	4¼	3	12	–	12	10¼
14	10	10	–	70	52	10	–	1	13	–	5	5¾	3	13	–	12	11¾
15	11	5	–	71	53	5	–	1	14	–	5	7½	3	14	–	13	1½
16	12	–	–	72	54	–	–	1	15	–	5	9	3	15	–	13	3
17	12	15	–	73	54	15	–	1	16	–	5	10½	3	16	–	13	4½
18	13	10	–	74	55	10	–	1	17	–	6	–¼	3	17	–	13	6¼
19	14	5	–	75	56	5	–	1	18	–	6	1¾	3	18	–	13	7¾
20	15	–	–	76	57	–	–	1	19	–	6	3½	3	19	–	13	9½
21	15	15	–	77	57	15	–	1	20	–	6	5	3	20	–	13	11
22	16	10	–	78	58	10	–	1	21	–	6	6¾	3	21	–	14	–¾
23	17	5	–	79	59	5	–	1	22	–	6	8¼	3	22	–	14	2¼
24	18	–	–	80	60	–	–	1	23	–	6	9¾	3	23	–	14	3¾
25	18	15	–	81	60	15	–	1	24	–	6	11½	3	24	–	14	5½
26	19	10	–	82	61	10	–	1	25	–	7	1	3	25	–	14	7
27	20	5	–	83	62	5	–	1	26	–	7	2¾	3	26	–	14	8¾
28	21	–	–	84	63	–	–	1	27	–	7	4¼	3	27	–	14	10¼
29	21	15	–	85	63	15	–	2	—	–	7	6					
30	22	10	–	86	64	10	–	2	1	–	7	7½	0	1	–	–	1½
31	23	5	–	87	65	5	–	2	2	–	7	9	0	2	–	–	3
32	24	–	–	88	66	–	–	2	3	–	7	10¾	0	3	–	–	4¾
33	24	15	–	89	66	15	–	2	4	–	8	–¼	0	4	–	–	6¼
34	25	10	–	90	67	10	–	2	5	–	8	2	0	5	–	–	8
35	26	5	–	91	68	5	–	2	6	–	8	3½	0	6	–	–	9½
36	27	–	–	92	69	–	–	2	7	–	8	5¼	0	7	–	–	11¼
37	27	15	–	93	69	15	–	2	8	–	8	6¾	0	8	–	1	–¾
38	28	10	–	94	70	10	–	2	9	–	8	8¼	0	9	–	1	2¼
39	29	5	–	95	71	5	–	2	10	–	8	10	0	10	–	1	4
40	30	–	–	96	72	–	–	2	11	–	8	11½	0	11	–	1	5½
41	30	15	–	97	72	15	–	2	12	–	9	1¼	0	12	–	1	7¼
42	31	10	–	98	73	10	–	2	13	–	9	2¾	0	13	–	1	8¾
43	32	5	–	99	74	5	–	2	14	–	9	4½	0	14	–	1	10½
44	33	–	–	100	75	–	–	2	15	–	9	6	0	15	–	2	–
45	33	15	–	200	150	–	–	2	16	–	9	7½	0	16	–	2	1½
46	34	10	–	300	225	–	–	2	17	–	9	9¼	0	17	–	2	3¼
47	35	5	–	400	300	–	–	2	18	–	9	10¾	0	18	–	2	4¾
48	36	–	–	500	375	–	–	2	19	–	10	–½	0	19	–	2	6½
49	36	15	–	600	450	–	–	2	20	–	10	2	0	20	–	2	8
50	37	10	–	700	525	–	–	2	21	–	10	3¾	0	21	–	2	9¾
51	38	5	–	800	600	–	–	2	22	–	10	5¼	0	22	–	2	11¼
52	39	–	–	900	675	–	–	2	23	–	10	6¾	0	23	–	3	–¾
53	39	15	–	1000	750	–	–	2	24	–	10	8½	0	24	–	3	2½
54	40	10	–	2000	1500	–	–	2	25	–	10	10	0	25	–	3	4
55	41	5	–	3000	2250	–	–	2	26	–	10	11¾	0	26	–	3	5¾
56	42	–	–	4000	3000	–	–	2	27	–	11	1¼	0	27	–	3	7¼

15*s*. 3*d*. *per Cwt*.

£15. 5s. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	15	3	57	43	9	3	1	–	–	3	9¾	3	–	–	11	5¼
2	1	10	6	58	44	4	6	1	1	–	3	11¼	3	1	–	11	6¾
3	2	5	9	59	44	19	9	1	2	–	4	1	3	2	–	11	8½
4	3	1	–	60	45	15	–	1	3	–	4	2½	3	3	–	11	10
5	3	16	3	61	46	10	3	1	4	–	4	4¼	3	4	–	11	11¾
6	4	11	6	62	47	5	6	1	5	–	4	5¾	3	5	–	12	1¼
7	5	6	9	63	48	–	9	1	6	–	4	7½	3	6	–	12	3
8	6	2	–	64	48	16	–	1	7	–	4	9	3	7	–	12	4½
9	6	17	3	65	49	11	3	1	8	–	4	10¾	3	8	–	12	6¼
10	7	12	6	66	50	6	6	1	9	–	5	–¼	3	9	–	12	7¾
11	8	7	9	67	51	1	9	1	10	–	5	2	3	10	–	12	9½
12	9	3	–	68	51	17	–	1	11	–	5	3½	3	11	–	12	11
13	9	18	3	69	52	12	3	1	12	–	5	5¼	3	12	–	13	–¾
14	10	13	6	70	53	7	6	1	13	–	5	6¾	3	13	–	13	2¼
15	11	8	9	71	54	2	9	1	14	–	5	8½	3	14	–	13	4
16	12	4	–	72	54	18	–	1	15	–	5	10¼	3	15	–	13	5¾
17	12	19	3	73	55	13	3	1	16	–	5	11¾	3	16	–	13	7¼
18	13	14	6	74	56	8	6	1	17	–	6	1½	3	17	–	13	9
19	14	9	9	75	57	3	9	1	18	–	6	3	3	18	–	13	10½
20	15	5	–	76	57	19	–	1	19	–	6	4¾	3	19	–	14	–¼
21	16	–	3	77	58	14	3	1	20	–	6	6¼	3	20	–	14	1¾
22	16	15	6	78	59	9	6	1	21	–	6	8	3	21	–	14	3½
23	17	10	9	79	60	4	9	1	22	–	6	9½	3	22	–	14	5
24	18	6	–	80	61	–	–	1	23	–	6	11¼	3	23	–	14	6¾
25	19	1	3	81	61	15	3	1	24	–	7	–¾	3	24	–	14	8¼
26	19	16	6	82	62	10	6	1	25	–	7	2½	3	25	–	14	10
27	20	11	9	83	63	5	9	1	26	–	7	4	3	26	–	14	11½
28	21	7	–	84	64	1	–	1	27	–	7	5¾	3	27	–	15	1¼
29	22	2	3	85	64	16	3	2	—	–	7	7½					
30	22	17	6	86	65	11	6	2	1	–	7	9	0	1	–	–	1½
31	23	12	9	87	66	6	9	2	2	–	7	10¾	0	2	–	–	3¼
32	24	8	–	88	67	2	–	2	3	–	8	–¼	0	3	–	–	4¾
33	25	3	3	89	67	17	3	2	4	–	8	2	0	4	–	–	6½
34	25	18	6	90	68	12	6	2	5	–	8	3½	0	5	–	–	8
35	26	13	9	91	69	7	9	2	6	–	8	5¼	0	6	–	–	9¾
36	27	9	–	92	70	3	–	2	7	–	8	6¾	0	7	–	–	11¼
37	28	4	3	93	70	18	3	2	8	–	8	8½	0	8	–	1	1
38	28	19	6	94	71	13	6	2	9	–	8	10	0	9	–	1	2½
39	29	14	9	95	72	8	9	2	10	–	8	11¾	0	10	–	1	4¼
40	30	10	–	96	73	4	–	2	11	–	9	1¼	0	11	–	1	5¾
41	31	5	3	97	73	19	3	2	12	–	9	3	0	12	–	1	7½
42	32	–	6	98	74	14	6	2	13	–	9	4½	0	13	–	1	9
43	32	15	9	99	75	9	9	2	14	–	9	6¼	0	14	–	1	10¾
44	33	11	–	100	76	5	–	2	15	–	9	8	0	15	–	2	–½
45	34	6	3	200	152	10	–	2	16	–	9	9½	0	16	–	2	2
46	35	1	6	300	228	15	–	2	17	–	9	11¼	0	17	–	2	3¾
47	35	16	9	400	305	–	–	2	18	–	10	–¾	0	18	–	2	5¼
48	36	12	–	500	381	5	–	2	19	–	10	2½	0	19	–	2	7
49	37	7	3	600	457	10	–	2	20	–	10	4	0	20	–	2	8½
50	38	2	6	700	533	15	–	2	21	–	10	5¾	0	21	–	2	10¼
51	38	17	9	800	610	–	–	2	22	–	10	7¼	0	22	–	2	11¾
52	39	13	–	900	686	5	–	2	23	–	10	9	0	23	–	3	1½
53	40	8	3	1000	762	10	–	2	24	–	10	10½	0	24	–	3	3
54	41	3	6	2000	1525	–	–	2	25	–	11	–¼	0	25	–	3	4¾
55	41	18	9	3000	2287	10	–	2	26	–	11	1¾	0	26	–	3	6¼
56	42	14	–	4000	3050	–	–	2	27	–	11	3½	0	27	–	3	8

15s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	15	6	57	44	3	6	1	–	–	3	10½	3	–	–	11	7½
2	1	11	–	58	44	19	–	1	1	–	4	–	3	1	–	11	9
3	2	6	6	59	45	14	6	1	2	–	4	1¾	3	2	–	11	10¾
4	3	2	–	60	46	10	–	1	3	–	4	3¼	3	3	–	12	–¼
5	3	17	6	61	47	5	6	1	4	–	4	5	3	4	–	12	2
6	4	13	–	62	48	1	–	1	5	–	4	6¾	3	5	–	12	3¾
7	5	8	6	63	48	16	6	1	6	–	4	8¼	3	6	–	12	5¼
8	6	4	–	64	49	12	–	1	7	–	4	10	3	7	–	12	7
9	6	19	6	65	50	7	6	1	8	–	4	11¾	3	8	–	12	8¾
10	7	15	–	66	51	3	–	1	9	–	5	1¼	3	9	–	12	10¼
11	8	10	6	67	51	18	6	1	10	–	5	3	3	10	–	13	–
12	9	6	–	68	52	14	–	1	11	–	5	4¾	3	11	–	13	1¾
13	10	1	6	69	53	9	6	1	12	–	5	6¼	3	12	–	13	3¼
14	10	17	–	70	54	5	–	1	13	–	5	8	3	13	–	13	5
15	11	12	6	71	55	–	6	1	14	–	5	9¾	3	14	–	13	6¾
16	12	8	–	72	55	16	–	1	15	–	5	11¼	3	15	–	13	8¼
17	13	3	6	73	56	11	6	1	16	–	6	1	3	16	–	13	10
18	13	19	–	74	57	7	–	1	17	–	6	2½	3	17	–	13	11½
19	14	14	6	75	58	2	6	1	18	–	6	4¼	3	18	–	14	1¼
20	15	10	–	76	58	18	–	1	19	–	6	6	3	19	–	14	3
21	16	5	6	77	59	13	6	1	20	–	6	7½	3	20	–	14	4½
22	17	1	–	78	60	9	–	1	21	–	6	9¼	3	21	–	14	6¼
23	17	16	6	79	61	4	6	1	22	–	6	11	3	22	–	14	8
24	18	12	–	80	62	–	–	1	23	–	7	–½	3	23	–	14	9½
25	19	7	6	81	62	15	6	1	24	–	7	2¼	3	24	–	14	11¼
26	20	3	–	82	63	11	–	1	25	–	7	4	3	25	–	15	1
27	20	18	6	83	64	6	6	1	26	–	7	5½	3	26	–	15	2½
28	21	14	–	84	65	2	–	1	27	–	7	7¼	3	27	–	15	4¼
29	22	9	6	85	65	17	6	2	—	–	7	9					
30	23	5	–	86	66	13	–	2	1	–	7	10½	0	1	–	–	1½
31	24	–	6	87	67	8	6	2	2	–	8	–¼	0	2	–	–	3¼
32	24	16	–	88	68	4	–	2	3	–	8	1¾	0	3	–	–	4¾
33	25	11	6	89	68	19	6	2	4	–	8	3½	0	4	–	–	6½
34	26	7	–	90	69	15	–	2	5	–	8	5¼	0	5	–	–	8¼
35	27	2	6	91	70	10	6	2	6	–	8	6¾	0	6	–	–	9¾
36	27	18	–	92	71	6	–	2	7	–	8	8½	0	7	–	–	11½
37	28	13	6	93	72	1	6	2	8	–	8	10¼	0	8	–	1	1¼
38	29	9	–	94	72	17	0	2	9	–	8	11¾	0	9	–	1	2¾
39	30	4	6	95	73	12	6	2	10	–	9	1½	0	10	–	1	4½
40	31	–	–	96	74	8	–	2	11	–	9	3¼	0	11	–	1	6¼
41	31	15	6	97	75	3	6	2	12	–	9	4¾	0	12	–	1	7¾
42	32	11	–	98	75	19	–	2	13	–	9	6½	0	13	–	1	9½
43	33	6	6	99	76	14	6	2	14	–	9	8¼	0	14	–	1	11¼
44	34	2	–	100	77	10	–	2	15	–	9	9¾	0	15	–	2	–¾
45	34	17	6	200	155	–	–	2	16	–	9	11½	0	16	–	2	2½
46	35	13	–	300	232	10	–	2	17	–	10	1	0	17	–	2	4
47	36	8	6	400	310	–	–	2	18	–	10	2¾	0	18	–	2	5¾
48	37	4	–	500	387	10	–	2	19	–	10	4½	0	19	–	2	7½
49	37	19	6	600	465	–	–	2	20	–	10	6	0	20	–	2	9
50	38	15	–	700	542	10	–	2	21	–	10	7¾	0	21	–	2	10¾
51	39	10	6	800	620	–	–	2	22	–	10	9½	0	22	–	3	–½
52	40	6	–	900	697	10	–	2	23	–	10	11	0	23	–	3	2
53	41	1	6	1000	775	–	–	2	24	–	11	–¾	0	24	–	3	3¾
54	41	17	–	2000	1550	–	–	2	25	–	11	2½	0	25	–	3	5½
55	42	12	6	3000	2325	–	–	2	26	–	11	4	0	26	–	3	7
56	43	8	–	4000	3100	–	–	2	27	–	11	5¾	0	27	–	3	8¾

16*s*. 3*d*. *per Cwt.* £16. 5*s*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	16	3	57	46	6	3	1	–	–	4	–¾	3	–	–	12	2¼
2	1	12	6	58	47	2	6	1	1	–	4	2¼	3	1	–	12	3¾
3	2	8	9	59	47	18	9	1	2	–	4	4	3	2	–	12	5½
4	3	5	–	60	48	15	–	1	3	–	4	5¾	3	3	–	12	7¼
5	4	1	3	61	49	11	3	1	4	–	4	7½	3	4	–	12	9
6	4	17	6	62	50	7	6	1	5	–	4	9¼	3	5	–	12	10¾
7	5	13	9	63	51	3	9	1	6	–	4	11	3	6	–	13	–½
8	6	10	–	64	52	–	–	1	7	–	5	–¾	3	7	–	13	2¼
9	7	6	3	65	52	16	3	1	8	–	5	2½	3	8	–	13	4
10	8	2	6	66	53	12	6	1	9	–	5	4¼	3	9	–	13	5¾
11	8	18	9	67	54	8	9	1	10	–	5	6	3	10	–	13	7½
12	9	15	–	68	55	5	–	1	11	–	5	7¾	3	11	–	13	9¼
13	10	11	3	69	56	1	3	1	12	–	5	9½	3	12	–	13	11
14	11	7	6	70	56	17	6	1	13	–	5	11¼	3	13	–	14	–¾
15	12	3	9	71	57	13	9	1	14	–	6	1	3	14	–	14	2½
16	13	–	–	72	58	10	–	1	15	–	6	2¾	3	15	–	14	4¼
17	13	16	3	73	59	6	3	1	16	–	6	4½	3	16	–	14	6
18	14	12	6	74	60	2	6	1	17	–	6	6¼	3	17	–	14	7¾
19	15	8	9	75	60	18	9	1	18	–	6	8	3	18	–	14	9½
20	16	5	–	76	61	15	–	1	19	–	6	9¾	3	19	–	14	11¼
21	17	1	3	77	62	11	3	1	20	–	6	11½	3	20	–	15	1
22	17	17	6	78	63	7	6	1	21	–	7	1¼	3	21	–	15	2¾
23	18	13	9	79	64	3	9	1	22	–	7	3	3	22	–	15	4½
24	19	10	–	80	65	–	–	1	23	–	7	4¾	3	23	–	15	6¼
25	20	6	3	81	65	16	3	1	24	–	7	6½	3	24	–	15	8
26	21	2	6	82	66	12	6	1	25	–	7	8¼	3	25	–	15	9¾
27	21	18	9	83	67	8	9	1	26	–	7	10	3	26	–	15	11½
28	22	15	–	84	68	5	–	1	27	–	7	11¾	3	27	–	16	1¼
29	23	11	3	85	69	1	3	2	—	–	8	1½					
30	24	7	6	86	69	17	6	2	1	–	8	3	0	1	–	–	1½
31	25	3	9	87	70	13	9	2	2	–	8	4¾	0	2	–	–	3¼
32	26	–	–	88	71	10	–	2	3	–	8	6½	0	3	–	–	5
33	26	16	3	89	72	6	3	2	4	–	8	8¼	0	4	–	–	6¾
34	27	12	6	90	73	2	6	2	5	–	8	10	0	5	–	–	8½
35	28	8	9	91	73	18	9	2	6	–	8	11¾	0	6	–	–	10¼
36	29	5	–	92	74	15	–	2	7	–	9	1½	0	7	–	1	–
37	30	1	3	93	75	11	3	2	8	–	9	3¼	0	8	–	1	1¾
38	30	17	6	94	76	7	6	2	9	–	9	5	0	9	–	1	3½
39	31	13	9	95	77	3	9	2	10	–	9	6¾	0	10	–	1	5¼
40	32	10	–	96	78	–	–	2	11	–	9	8½	0	11	–	1	7
41	33	6	3	97	78	16	3	2	12	–	9	10¼	0	12	–	1	8¾
42	34	2	6	98	79	12	6	2	13	–	10	–	0	13	–	1	10½
43	34	18	9	99	80	8	9	2	14	–	10	1¾	0	14	–	2	–¼
44	35	15	–	100	81	5	–	2	15	–	10	3½	0	15	–	2	2
45	36	11	3	200	162	10	–	2	16	–	10	5¼	0	16	–	2	3¾
46	37	7	6	300	243	15	–	2	17	–	10	7	0	17	–	2	5½
47	38	3	9	400	325	–	–	2	18	–	10	8¾	0	18	–	2	7¼
48	39	–	–	500	406	5	–	2	19	–	10	10½	0	19	–	2	9
49	39	16	3	600	487	10	–	2	20	–	11	–¼	0	20	–	2	10¾
50	40	12	6	700	568	15	–	2	21	–	11	2	0	21	–	3	–½
51	41	8	9	800	650	–	–	2	22	–	11	3¾	0	22	–	3	2¼
52	42	5	–	900	731	5	–	2	23	–	11	5½	0	23	–	3	4
53	43	1	3	1000	812	10	–	2	24	–	11	7¼	0	24	–	3	5¾
54	43	17	6	2000	1625	–	–	2	25	–	11	9	0	25	–	3	7½
55	44	13	9	3000	2437	10	–	2	26	–	11	10¾	0	26	–	3	9¼
56	45	10	–	4000	3250	–	–	2	27	–	12	–½	0	27	–	3	11

1¾d. per lb. 16s. 4d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	16	4	57	46	11	–	1	–	–	4	1	3	–	–	12	3
2	1	12	8	58	47	7	4	1	1	–	4	2¾	3	1	–	12	4¾
3	2	9	–	59	48	3	8	1	2	–	4	4½	3	2	–	12	6½
4	3	5	4	60	49	–	–	1	3	–	4	6¼	3	3	–	12	8¼
5	4	1	8	61	49	16	4	1	4	–	4	8	3	4	–	12	10
6	4	18	–	62	50	12	8	1	5	–	4	9¾	3	5	–	12	11¾
7	5	14	4	63	51	9	–	1	6	–	4	11½	3	6	–	13	1½
8	6	10	8	64	52	5	4	1	7	–	5	1¼	3	7	–	13	3¼
9	7	7	–	65	53	1	8	1	8	–	5	3	3	8	–	13	5
10	8	3	4	66	53	18	–	1	9	–	5	4¾	3	9	–	13	6¾
11	8	19	8	67	54	14	4	1	10	–	5	6½	3	10	–	13	8½
12	9	16	–	68	55	10	8	1	11	–	5	8¼	3	11	–	13	10¼
13	10	12	4	69	56	7	–	1	12	–	5	10	3	12	–	14	–
14	11	8	8	70	57	3	4	1	13	–	5	11¾	3	13	–	14	1¾
15	12	5	–	71	57	19	8	1	14	–	6	1½	3	14	–	14	3½
16	13	1	4	72	58	16	–	1	15	–	6	3¼	3	15	–	14	5¼
17	13	17	8	73	59	12	4	1	16	–	6	5	3	16	–	14	7
18	14	14	–	74	60	8	8	1	17	–	6	6¾	3	17	–	14	8¾
19	15	10	4	75	61	5	–	1	18	–	6	8½	3	18	–	14	10½
20	16	6	8	76	62	1	4	1	19	–	6	10¼	3	19	–	15	–¼
21	17	3	–	77	62	17	8	1	20	–	7	–	3	20	–	15	2
22	17	19	4	78	63	14	–	1	21	–	7	1¾	3	21	–	15	3¾
23	18	15	8	79	64	10	4	1	22	–	7	3½	3	22	–	15	5½
24	19	12	–	80	65	6	8	1	23	–	7	5¼	3	23	–	15	7¼
25	20	8	4	81	66	3	–	1	24	–	7	7	3	24	–	15	9
26	21	4	8	82	66	19	4	1	25	–	7	8¾	3	25	–	15	10¾
27	22	1	–	83	67	15	8	1	26	–	7	10½	3	26	–	16	–½
28	22	17	4	84	68	12	–	1	27	–	8	–¼	3	27	–	16	2¼
29	23	13	8	85	69	8	4	2	—	–	8	2					
30	24	10	–	86	70	4	8	2	1	–	8	3¾	0	1	–	–	1¾
31	25	6	4	87	71	1	–	2	2	–	8	5½	0	2	–	–	3½
32	26	2	8	88	71	17	4	2	3	–	8	7¼	0	3	–	–	5¼
33	26	19	–	89	72	13	8	2	4	–	8	9	0	4	–	–	7
34	27	15	4	90	73	10	–	2	5	–	8	10¾	0	5	–	–	8¾
35	28	11	8	91	74	6	4	2	6	–	9	–½	0	6	–	–	10½
36	29	8	–	92	75	2	8	2	7	–	9	2¼	0	7	–	1	–¼
37	30	4	4	93	75	19	–	2	8	–	9	4	0	8	–	1	2
38	31	–	8	94	76	15	4	2	9	–	9	5¾	0	9	–	1	3¾
39	31	17	–	95	77	11	8	2	10	–	9	7½	0	10	–	1	5½
40	32	13	4	96	78	8	–	2	11	–	9	9¼	0	11	–	1	7¼
41	33	9	8	97	79	4	4	2	12	–	9	11	0	12	–	1	9
42	34	6	–	98	80	–	8	2	13	–	10	–¾	0	13	–	1	10¾
43	35	2	4	99	80	17	–	2	14	–	10	2½	0	14	–	2	–½
44	35	18	8	100	81	13	4	2	15	–	10	4¼	0	15	–	2	2¼
45	36	15	–	200	163	6	8	2	16	–	10	6	0	16	–	2	4
46	37	11	4	300	245	–	–	2	17	–	10	7¾	0	17	–	2	5¾
47	38	7	8	400	326	13	4	2	18	–	10	9½	0	18	–	2	7½
48	39	4	–	500	408	6	8	2	19	–	10	11¼	0	19	–	2	9¼
49	40	–	4	600	490	–	–	2	20	–	11	1	0	20	–	2	11
50	40	16	8	700	571	13	4	2	21	–	11	2¾	0	21	–	3	–¾
51	41	13	–	800	653	6	8	2	22	–	11	4½	0	22	–	3	2½
52	42	9	4	900	735	–	–	2	23	–	11	6¼	0	23	–	3	4¼
53	43	5	8	1000	816	13	4	2	24	–	11	8	0	24	–	3	6
54	44	2	–	2000	1633	6	8	2	25	–	11	9¾	0	25	–	3	7¾
55	44	18	4	3000	2450	–	–	2	26	–	11	11½	0	26	–	3	9½
56	45	14	8	4000	3266	13	4	2	27	–	12	1¼	0	27	–	3	11¼

16*s*. 6*d*. *per Cwt*.

£16. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	16	6	57	47	-	6	1	-	-	4	1½	3	-	-	12	4½
2	1	13	-	58	47	17	-	1	1	-	4	3¼	3	1	-	12	6¼
3	2	9	6	59	48	13	6	1	2	-	4	5	3	2	-	12	8
4	3	6	-	60	49	10	-	1	3	-	4	6¾	3	3	-	12	9¾
5	4	2	6	61	50	6	6	1	4	-	4	8½	3	4	-	12	11½
6	4	19	-	62	51	3	-	1	5	-	4	10¼	3	5	-	13	1¼
7	5	15	6	63	51	19	6	1	6	-	5	-	3	6	-	13	3
8	6	12	-	64	52	16	-	1	7	-	5	1¾	3	7	-	13	4¾
9	7	8	6	65	53	12	6	1	8	-	5	3½	3	8	-	13	6½
10	8	5	-	66	54	9	-	1	9	-	5	5¼	3	9	-	13	8¼
11	9	1	6	67	55	5	6	1	10	-	5	7	3	10	-	13	10
12	9	18	-	68	56	2	-	1	11	-	5	8¾	3	11	-	13	11¾
13	10	14	6	69	56	18	6	1	12	-	5	10½	3	12	-	14	1½
14	11	11	-	70	57	15	-	1	13	-	6	-¼	3	13	-	14	3¼
15	12	7	6	71	58	11	6	1	14	-	6	2¼	3	14	-	14	5¼
16	13	4	-	72	59	8	-	1	15	-	6	4	3	15	-	14	7
17	14	-	6	73	60	4	6	1	16	-	6	5¾	3	16	-	14	8¾
18	14	17	-	74	61	1	-	1	17	-	6	7½	3	17	-	14	10½
19	15	13	6	75	61	17	6	1	18	-	6	9¼	3	18	-	15	-¼
20	16	10	-	76	62	14	-	1	19	-	6	11	3	19	-	15	2
21	17	6	6	77	63	10	6	1	20	-	7	-¾	3	20	-	15	3¾
22	18	3	-	78	64	7	-	1	21	-	7	2½	3	21	-	15	5½
23	18	19	6	79	65	3	6	1	22	-	7	4¼	3	22	-	15	7¼
24	19	16	-	80	66	-	-	1	23	-	7	6	3	23	-	15	9
25	20	12	6	81	66	16	6	1	24	-	7	7¾	3	24	-	15	10¾
26	21	9	-	82	67	13	-	1	25	-	7	9½	3	25	-	16	-½
27	22	5	6	83	68	9	6	1	26	-	7	11¼	3	26	-	16	2¼
28	23	2	-	84	69	6	-	1	27	-	8	1	3	27	-	16	4
29	23	18	6	85	70	2	6	2	—	-	8	3					
30	24	15	-	86	70	19	-	2	1	-	8	4¾	0	1	-	-	1¾
31	25	11	6	87	71	15	6	2	2	-	8	6½	0	2	-	-	3½
32	26	8	-	88	72	12	-	2	3	-	8	8¼	0	3	-	-	5¼
33	27	4	6	89	73	8	6	2	4	-	8	10	0	4	-	-	7
34	28	1	-	90	74	5	-	2	5	-	8	11¾	0	5	-	-	8¾
35	28	17	6	91	75	1	6	2	6	-	9	1½	0	6	-	-	10½
36	29	14	-	92	75	18	-	2	7	-	9	3¼	0	7	-	1	-¼
37	30	10	6	93	76	14	6	2	8	-	9	5	0	8	-	1	2
38	31	7	-	94	77	11	-	2	9	-	9	6¾	0	9	-	1	3¾
39	32	3	6	95	78	7	6	2	10	-	9	8½	0	10	-	1	5½
40	33	-	-	96	79	4	-	2	11	-	9	10¼	0	11	-	1	7¼
41	33	16	6	97	80	-	6	2	12	-	10	-	0	12	-	1	9
42	34	13	-	98	80	17	-	2	13	-	10	1¾	0	13	-	1	10¾
43	35	9	6	99	81	13	6	2	14	-	10	3¾	0	14	-	2	-¾
44	36	6	-	100	82	10	-	2	15	-	10	5½	0	15	-	2	2½
45	37	2	6	200	165	-	-	2	16	-	10	7¼	0	16	-	2	4¼
46	37	19	-	300	247	10	-	2	17	-	10	9	0	17	-	2	6
47	38	15	6	400	330	-	-	2	18	-	10	10¾	0	18	-	2	7¾
48	39	12	-	500	412	10	-	2	19	-	11	-½	0	19	-	2	9½
49	40	8	6	600	495	-	-	2	20	-	11	2¼	0	20	-	2	11¼
50	41	5	-	700	577	10	-	2	21	-	11	4	0	21	-	3	1
51	42	1	6	800	660	-	-	2	22	-	11	5¾	0	22	-	3	2¾
52	42	18	-	900	742	10	-	2	23	-	11	7½	0	23	-	3	4½
53	43	14	6	1000	825	-	-	2	24	-	11	9¼	0	24	-	3	6¼
54	44	11	-	2000	1650	-	-	2	25	-	11	11	0	25	-	3	8
55	45	7	6	3000	2475	-	-	2	26	-	12	-¾	0	26	-	3	9¾
56	46	4	-	4000	3300	-	-	2	27	-	12	2½	0	27	-	3	11½

£16. 15s. per Ton.

16s. 9d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	-	16	9	57	47	14	9	1	-	-	4	2¼	3	-	-	12	6¾
2	1	13	6	58	48	11	6	1	1	-	4	4	3	1	-	12	8½
3	2	10	3	59	49	8	3	1	2	-	4	5¾	3	2	-	12	10¼
4	3	7	-	60	50	5	-	1	3	-	4	7½	3	3	-	13	-
5	4	3	9	61	51	1	9	1	4	-	4	9¼	3	4	-	13	1¾
6	5	-	6	62	51	18	6	1	5	-	4	11	3	5	-	13	3½
7	5	17	3	63	52	15	3	1	6	-	5	1	3	6	-	13	5½
8	6	14	-	64	53	12	-	1	7	-	5	2¾	3	7	-	13	7¼
9	7	10	9	65	54	8	9	1	8	-	5	4½	3	8	-	13	9
10	8	7	6	66	55	5	6	1	9	-	5	6¼	3	9	-	13	10¾
11	9	4	3	67	56	2	3	1	10	-	5	8	3	10	-	14	-½
12	10	1	-	68	56	19	-	1	11	-	5	9¾	3	11	-	14	2¼
13	10	17	9	69	57	15	9	1	12	-	5	11¾	3	12	-	14	4¼
14	11	14	6	70	58	12	6	1	13	-	6	1½	3	13	-	14	6
15	12	11	3	71	59	9	3	1	14	-	6	3¼	3	14	-	14	7¾
16	13	8	-	72	60	6	-	1	15	-	6	5	3	15	-	14	9½
17	14	4	9	73	61	2	9	1	16	-	6	6¾	3	16	-	14	11¼
18	15	1	6	74	61	19	6	1	17	-	6	8¾	3	17	-	15	1¼
19	15	18	3	75	62	16	3	1	18	-	6	10½	3	18	-	15	3
20	16	15	-	76	63	13	-	1	19	-	7	-¼	3	19	-	15	4¾
21	17	11	9	77	64	9	9	1	20	-	7	2	3	20	-	15	6½
22	18	8	6	78	65	6	6	1	21	-	7	3¾	3	21	-	15	8¼
23	19	5	3	79	66	3	3	1	22	-	7	5½	3	22	-	15	10
24	20	2	-	80	67	-	-	1	23	-	7	7½	3	23	-	16	-
25	20	18	9	81	67	16	9	1	24	-	7	9¼	3	24	-	16	1¾
26	21	15	6	82	68	13	6	1	25	-	7	11	3	25	-	16	3½
27	22	12	3	83	69	10	3	1	26	-	8	-¾	3	26	-	16	5¼
28	23	9	-	84	70	7	-	1	27	-	8	2½	3	27	-	16	7
29	24	5	9	85	71	3	9	2	—	-	8	4½					
30	25	2	6	86	72	-	6	2	1	-	8	6¼	0	1	-	-	1¾
31	25	19	3	87	72	17	3	2	2	-	8	8	0	2	-	-	3½
32	26	16	-	88	73	14	-	2	3	-	8	9¾	0	3	-	-	5¼
33	27	12	9	89	74	10	9	2	4	-	8	11½	0	4	-	-	7
34	28	9	6	90	75	7	6	2	5	-	9	1¼	0	5	-	-	8¾
35	29	6	3	91	76	4	3	2	6	-	9	3¼	0	6	-	-	10¾
36	30	3	-	92	77	1	-	2	7	-	9	5	0	7	-	1	-½
37	30	19	9	93	77	17	9	2	8	-	9	6¾	0	8	-	1	2¼
38	31	16	6	94	78	14	6	2	9	-	9	8½	0	9	-	1	4
39	32	13	3	95	79	11	3	2	10	-	9	10¼	0	10	-	1	5¾
40	33	10	-	96	80	8	-	2	11	-	10	-	0	11	-	1	7½
41	34	6	9	97	81	4	9	2	12	-	10	2	0	12	-	1	9½
42	35	3	6	98	82	1	6	2	13	-	10	3¾	0	13	-	1	11¼
43	36	-	3	99	82	18	3	2	14	-	10	5½	0	14	-	2	1
44	36	17	-	100	83	15	-	2	15	-	10	7¼	0	15	-	2	2¾
45	37	13	9	200	167	10	-	2	16	-	10	9	0	16	-	2	4½
46	38	10	6	300	251	5	-	2	17	-	10	11	0	17	-	2	6½
47	39	7	3	400	335	-	-	2	18	-	11	-¾	0	18	-	2	8¼
48	40	4	-	500	418	15	-	2	19	-	11	2½	0	19	-	2	10
49	41	-	9	600	502	10	-	2	20	-	11	4¼	0	20	-	2	11¾
50	41	17	6	700	586	5	-	2	21	-	11	6	0	21	-	3	1½
51	42	14	3	800	670	-	-	2	22	-	11	7¾	0	22	-	3	3¼
52	43	11	-	900	753	15	-	2	23	-	11	9¾	0	23	-	3	5¼
53	44	7	9	1000	837	10	-	2	24	-	11	11½	0	24	-	3	7
54	45	4	6	2000	1675	-	-	2	25	-	12	1¼	0	25	-	3	8¾
55	46	1	3	3000	2512	10	-	2	26	-	12	3	0	26	-	3	10½
56	46	18	-	4000	3350	-	-	2	27	-	12	4¾	0	27	-	4	-¼

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	17	–	57	48	9	–	1	–	–	4	3	3	–	–	12	9
2	1	14	–	58	49	6	–	1	1	–	4	4¾	3	1	–	12	10¾
3	2	11	–	59	50	3	–	1	2	–	4	6½	3	2	–	13	–½
4	3	8	–	60	51	–	–	1	3	–	4	8¼	3	3	–	13	2¼
5	4	5	–	61	51	17	–	1	4	–	4	10¼	3	4	–	13	4¼
6	5	2	–	62	52	14	–	1	5	–	5	–	3	5	–	13	6
7	5	19	–	63	53	11	–	1	6	–	5	1¾	3	6	–	13	7¾
8	6	16	–	64	54	8	–	1	7	–	5	3¾	3	7	–	13	9¾
9	7	13	–	65	55	5	–	1	8	–	5	5½	3	8	–	13	11½
10	8	10	–	66	56	2	–	1	9	–	5	7¼	3	9	–	14	1¼
11	9	7	–	67	56	19	–	1	10	–	5	9	3	10	–	14	3
12	10	4	–	68	57	16	–	1	11	–	5	11	3	11	–	14	5
13	11	1	–	69	58	13	–	1	12	–	6	–¾	3	12	–	14	6¾
14	11	18	–	70	59	10	–	1	13	–	6	2½	3	13	–	14	8½
15	12	15	–	71	60	7	–	1	14	–	6	4½	3	14	–	14	10½
16	13	12	–	72	61	4	–	1	15	–	6	6¼	3	15	–	15	–¼
17	14	9	–	73	62	1	–	1	16	–	6	8	3	16	–	15	2
18	15	6	–	74	62	18	–	1	17	–	6	9½	3	17	–	15	3¾
19	16	3	–	75	63	15	–	1	18	–	6	11¾	3	18	–	15	5¾
20	17	–	–	76	64	12	–	1	19	–	7	1½	3	19	–	15	7½
21	17	17	–	77	65	9	–	1	20	–	7	3¼	3	20	–	15	9¼
22	18	14	–	78	66	6	–	1	21	–	7	5¼	3	21	–	15	11¼
23	19	11	–	79	67	3	–	1	22	–	7	7	3	22	–	16	1
24	20	8	–	80	68	–	–	1	23	–	7	8¾	3	23	–	16	2¾
25	21	5	–	81	68	17	–	1	24	–	7	10½	3	24	–	16	4½
26	22	2	–	82	69	14	–	1	25	–	8	–½	3	25	–	16	6½
27	22	19	–	83	70	11	–	1	26	–	8	2¼	3	26	–	16	8¼
28	23	16	–	84	71	8	–	1	27	–	8	4	3	27	–	16	10
29	24	13	–	85	72	5	–	2	—	–	8	6					
30	25	10	–	86	73	2	–	2	1	–	8	7¾	0	1	–	–	1¾
31	26	7	–	87	73	19	–	2	2	–	8	9½	0	2	–	–	3½
32	27	4	–	88	74	16	–	2	3	–	8	11¼	0	3	–	–	5¼
33	28	1	–	89	75	13	–	2	4	–	9	1¼	0	4	–	–	7¼
34	28	18	–	90	76	10	–	2	5	–	9	3	0	5	–	–	9
35	29	15	–	91	77	7	–	2	6	–	9	4¾	0	6	–	–	10¾
36	30	12	–	92	78	4	–	2	7	–	9	6¾	0	7	–	1	–¾
37	31	9	–	93	79	1	–	2	8	–	9	8½	0	8	–	1	2½
38	32	6	–	94	79	18	–	2	9	–	9	10¼	0	9	–	1	4¼
39	33	3	–	95	80	15	–	2	10	–	10	–	0	10	–	1	6
40	34	–	–	96	81	12	–	2	11	–	10	2	0	11	–	1	8
41	34	17	–	97	82	9	–	2	12	–	10	3¾	0	12	–	1	9¾
42	35	14	–	98	83	6	–	2	13	–	10	5½	0	13	–	1	11½
43	36	11	–	99	84	3	–	2	14	–	10	7½	0	14	–	2	1½
44	37	8	–	100	85	–	–	2	15	–	10	9¼	0	15	–	2	3¼
45	38	5	–	200	170	–	–	2	16	–	10	11	0	16	–	2	5
46	39	2	–	300	255	–	–	2	17	–	11	–¾	0	17	–	2	6¾
47	39	19	–	400	340	–	–	2	18	–	11	2¾	0	18	–	2	8¾
48	40	16	–	500	425	–	–	2	19	–	11	4½	0	19	–	2	10½
49	41	13	–	600	510	–	–	2	20	–	11	6¼	0	20	–	3	–¼
50	42	10	–	700	595	–	–	2	21	–	11	8¼	0	21	–	3	2¼
51	43	7	–	800	680	–	–	2	22	–	11	10	0	22	–	3	4
52	44	4	–	900	765	–	–	2	23	–	11	11¾	0	23	–	3	5¾
53	45	1	–	1000	850	–	–	2	24	–	12	1½	0	24	–	3	7½
54	45	18	–	2000	1700	–	–	2	25	–	12	3½	0	25	–	3	9½
55	46	15	–	3000	2550	–	–	2	26	–	12	5¼	0	26	–	3	11¼
56	47	12	–	4000	3400	–	–	2	27	–	12	7	0	27	–	4	1

£17. 5s. per Ton. **17s. 3d. per Cwt.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	17	3	57	49	3	3	1	–	–	4	3¾	3	–	–	12	11¼
2	1	14	6	58	50	–	6	1	1	–	4	5½	3	1	–	13	1
3	2	11	9	59	50	17	9	1	2	–	4	7¼	3	2	–	13	2¾
4	3	9	–	60	51	15	–	1	3	–	4	9¼	3	3	–	13	4¾
5	4	6	3	61	52	12	3	1	4	–	4	11	3	4	–	13	6½
6	5	3	6	62	53	9	6	1	5	–	5	–¾	3	5	–	13	8¼
7	6	–	9	63	54	6	9	1	6	–	5	2¾	3	6	–	13	10¼
8	6	18	–	64	55	4	–	1	7	–	5	4½	3	7	–	14	–
9	7	15	3	65	56	1	3	1	8	–	5	6½	3	8	–	14	2
10	8	12	6	66	56	18	6	1	9	–	5	8¼	3	9	–	14	3¾
11	9	9	9	67	57	15	9	1	10	–	5	10	3	10	–	14	5½
12	10	7	–	68	58	13	–	1	11	–	6	–	3	11	–	14	7½
13	11	4	3	69	59	10	3	1	12	–	6	1¾	3	12	–	14	9¼
14	12	1	6	70	60	7	6	1	13	–	6	3¾	3	13	–	14	11¼
15	12	18	9	71	61	4	9	1	14	–	6	5½	3	14	–	15	1
16	13	16	–	72	62	2	–	1	15	–	6	7¼	3	15	–	15	2¾
17	14	13	3	73	62	19	3	1	16	–	6	9¼	3	16	–	15	4¾
18	15	10	6	74	63	16	6	1	17	–	6	11	3	17	–	15	6½
19	16	7	9	75	64	13	9	1	18	–	7	1	3	18	–	15	8½
20	17	5	–	76	65	11	–	1	19	–	7	2¾	3	19	–	15	10¼
21	18	2	3	77	66	8	3	1	20	–	7	4½	3	20	–	16	–
22	18	19	6	78	67	5	6	1	21	–	7	6½	3	21	–	16	2
23	19	16	9	79	68	2	9	1	22	–	7	8¼	3	22	–	16	3¾
24	20	14	–	80	69	–	–	1	23	–	7	10¼	3	23	–	16	5¾
25	21	11	3	81	69	17	3	1	24	–	8	–	3	24	–	16	7½
26	22	8	6	82	70	14	6	1	25	–	8	1¾	3	25	–	16	9¼
27	23	5	9	83	71	11	9	1	26	–	8	3¾	3	26	–	16	11¼
28	24	3	–	84	72	9	–	1	27	–	8	5½	3	27	–	17	1
29	25	–	3	85	73	6	3	2	—	–	8	7½					
30	25	17	6	86	74	3	6	2	1	–	8	9¼	0	1	–	–	1¾
31	26	14	9	87	75	–	9	2	2	–	8	11	0	2	–	–	3½
32	27	12	–	88	75	18	–	2	3	–	9	1	0	3	–	–	5½
33	28	9	3	89	76	15	3	2	4	–	9	2¾	0	4	–	–	7¼
34	29	6	6	90	77	12	6	2	5	–	9	4½	0	5	–	–	9
35	30	3	9	91	78	9	9	2	6	–	9	6½	0	6	–	–	11
36	31	1	–	92	79	7	–	2	7	–	9	8¼	0	7	–	1	–¾
37	31	18	3	93	80	4	3	2	8	–	9	10¼	0	8	–	1	2¾
38	32	15	6	94	81	1	6	2	9	–	10	–	0	9	–	1	4½
39	33	12	9	95	81	18	9	2	10	–	10	1¾	0	10	–	1	6¼
40	34	10	–	96	82	16	–	2	11	–	10	3¾	0	11	–	1	8¼
41	35	7	3	97	83	13	3	2	12	–	10	5½	0	12	–	1	10
42	36	4	6	98	84	10	6	2	13	–	10	7½	0	13	–	2	–
43	37	1	9	99	85	7	9	2	14	–	10	9¼	0	14	–	2	1¾
44	37	19	–	100	86	5	–	2	15	–	10	11	0	15	–	2	3½
45	38	16	3	200	172	10	–	2	16	–	11	1	0	16	–	2	5½
46	39	13	6	300	258	15	–	2	17	–	11	2¾	0	17	–	2	7¼
47	40	10	9	400	345	–	–	2	18	–	11	4¾	0	18	–	2	9¼
48	41	8	–	500	431	5	–	2	19	–	11	6½	0	19	–	2	11
49	42	5	3	600	517	10	–	2	20	–	11	8¼	0	20	–	3	–¾
50	43	2	6	700	603	15	–	2	21	–	11	10¼	0	21	–	3	2¾
51	43	19	9	800	690	–	–	2	22	–	12	–	0	22	–	3	4½
52	44	17	–	900	776	5	–	2	23	–	12	2	0	23	–	3	6½
53	45	14	3	1000	862	10	–	2	24	–	12	3¾	0	24	–	3	8¼
54	46	11	6	2000	1725	–	–	2	25	–	12	5½	0	25	–	3	10
55	47	8	9	3000	2587	10	–	2	26	–	12	7½	0	26	–	4	–
56	48	6	–	4000	3450	–	–	2	27	–	12	9¼	0	27	–	4	1¾

17*s*. 6*d*. *per Cwt*. £17. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	17	6	57	49	17	6	1	–	–	4	4½	3	–	–	13	1½
2	1	15	–	58	50	15	–	1	1	–	4	6¼	3	1	–	13	3¼
3	2	12	6	59	51	12	6	1	2	–	4	8¼	3	2	–	13	5¼
4	3	10	–	60	52	10	–	1	3	–	4	10	3	3	–	13	7
5	4	7	6	61	53	7	6	1	4	–	5	–	3	4	–	13	9
6	5	5	–	62	54	5	–	1	5	–	5	1¾	3	5	–	13	10¾
7	6	2	6	63	55	2	6	1	6	–	5	3¾	3	6	–	14	–¾
8	7	–	–	64	56	–	–	1	7	–	5	5½	3	7	–	14	2½
9	7	17	6	65	56	17	6	1	8	–	5	7½	3	8	–	14	4½
10	8	15	–	66	57	15	–	1	9	–	5	9¼	3	9	–	14	6¼
11	9	12	6	67	58	12	6	1	10	–	5	11¼	3	10	–	14	8¼
12	10	10	–	68	59	10	–	1	11	–	6	1	3	11	–	14	10
13	11	7	6	69	60	7	6	1	12	–	6	3	3	12	–	15	–
14	12	5	–	70	61	5	–	1	13	–	6	4¾	3	13	–	15	1¾
15	13	2	6	71	62	2	6	1	14	–	6	6¾	3	14	–	15	3¾
16	14	–	–	72	63	–	–	1	15	–	6	8½	3	15	–	15	5½
17	14	17	6	73	63	17	6	1	16	–	6	10½	3	16	–	15	7½
18	15	15	–	74	64	15	–	1	17	–	7	–¼	3	17	–	15	9¼
19	16	12	6	75	65	12	6	1	18	–	7	2¼	3	18	–	15	11¼
20	17	10	–	76	66	10	–	1	19	–	7	4	3	19	–	16	1
21	18	7	6	77	67	7	6	1	20	–	7	6	3	20	–	16	3
22	19	5	–	78	68	5	–	1	21	–	7	7¾	3	21	–	16	4¾
23	20	2	6	79	69	2	6	1	22	–	7	9¾	3	22	–	16	6¾
24	21	–	–	80	70	–	–	1	23	–	7	11½	3	23	–	16	8½
25	21	17	6	81	70	17	6	1	24	–	8	1½	3	24	–	16	10½
26	22	15	–	82	71	15	–	1	25	–	8	3¼	3	25	–	17	–¼
27	23	12	6	83	72	12	6	1	26	–	8	5¼	3	26	–	17	2¼
28	24	10	–	84	73	10	–	1	27	–	8	7	3	27	–	17	4
29	25	7	6	85	74	7	6	2	—	–	8	9					
30	26	5	–	86	75	5	–	2	1	–	8	10¾	0	1	–	–	1¾
31	27	2	6	87	76	2	6	2	2	–	9	–¾	0	2	–	–	3¾
32	28	–	–	88	77	–	–	2	3	–	9	2½	0	3	–	–	5½
33	28	17	6	89	77	17	6	2	4	–	9	4½	0	4	–	–	7½
34	29	15	–	90	78	15	–	2	5	–	9	6¼	0	5	–	–	9¼
35	30	12	6	91	79	12	6	2	6	–	9	8¼	0	6	–	–	11¼
36	31	10	–	92	80	10	–	2	7	–	9	10	0	7	–	1	1
37	32	7	6	93	81	7	6	2	8	–	10	–	0	8	–	1	3
38	33	5	–	94	82	5	–	2	9	–	10	1¾	0	9	–	1	4¾
39	34	2	6	95	83	2	6	2	10	–	10	3¾	0	10	–	1	6¾
40	35	–	–	96	84	–	–	2	11	–	10	5½	0	11	–	1	8½
41	35	17	6	97	84	17	6	2	12	–	10	7½	0	12	–	1	10½
42	36	15	–	98	85	15	–	2	13	–	10	9¼	0	13	–	2	–¼
43	37	12	6	99	86	12	6	2	14	–	10	11¼	0	14	–	2	2¼
44	38	10	–	100	87	10	–	2	15	–	11	1	0	15	–	2	4
45	39	7	6	200	175	–	–	2	16	–	11	3	0	16	–	2	6
46	40	5	–	300	262	10	–	2	17	–	11	4¾	0	17	–	2	7¾
47	41	2	6	400	350	–	–	2	18	–	11	6¾	0	18	–	2	9¾
48	42	–	–	500	437	10	–	2	19	–	11	8½	0	19	–	2	11½
49	42	17	6	600	525	–	–	2	20	–	11	10½	0	20	–	3	1½
50	43	15	–	700	612	10	–	2	21	–	12	–¼	0	21	–	3	3¼
51	44	12	6	800	700	–	–	2	22	–	12	2¼	0	22	–	3	5¼
52	45	10	–	900	787	10	–	2	23	–	12	4	0	23	–	3	7
53	46	7	6	1000	875	–	–	2	24	–	12	6	0	24	–	3	9
54	47	5	–	2000	1750	–	–	2	25	–	12	7¾	0	25	–	3	10¾
55	48	2	6	3000	2625	–	–	2	26	–	12	9¾	0	26	–	4	–¾
56	49	–	–	4000	3500	–	–	2	27	–	12	11½	0	27	–	4	2½

£17. 15*s*. *per Ton*.

17*s*. 9*d*. *per Cwt*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	17	9	57	50	11	9	1	–	–	4	5¼	3	–	–	13	3¾
2	1	15	6	58	51	9	6	1	1	–	4	7	3	1	–	13	5½
3	2	13	3	59	52	7	3	1	2	–	4	9	3	2	–	13	7½
4	3	11	–	60	53	5	–	1	3	–	4	10¾	3	3	–	13	9¼
5	4	8	9	61	54	2	9	1	4	–	5	–¾	3	4	–	13	11¼
6	5	6	6	62	55	–	6	1	5	–	5	2¾	3	5	–	14	1¼
7	6	4	3	63	55	18	3	1	6	–	5	4½	3	6	–	14	3
8	7	2	–	64	56	16	–	1	7	–	5	6½	3	7	–	14	5
9	7	19	9	65	57	13	9	1	8	–	5	8¼	3	8	–	14	6¾
10	8	17	6	66	58	11	6	1	9	–	5	10¼	3	9	–	14	8¾
11	9	15	3	67	59	9	3	1	10	–	6	–¼	3	10	–	14	10¾
12	10	13	–	68	60	7	–	1	11	–	6	2	3	11	–	15	–½
13	11	10	9	69	61	4	9	1	12	–	6	4	3	12	–	15	2½
14	12	8	6	70	62	2	6	1	13	–	6	5¾	3	13	–	15	4¼
15	13	6	3	71	63	–	3	1	14	–	6	7¾	3	14	–	15	6¼
16	14	4	–	72	63	18	–	1	15	–	6	9¾	3	15	–	15	8¼
17	15	1	9	73	64	15	9	1	16	–	6	11½	3	16	–	15	10
18	15	19	6	74	65	13	6	1	17	–	7	1½	3	17	–	16	–
19	16	17	3	75	66	11	3	1	18	–	7	3¼	3	18	–	16	1¾
20	17	15	–	76	67	9	–	1	19	–	7	5¼	3	19	–	16	3¾
21	18	12	9	77	68	6	9	1	20	–	7	7¼	3	20	–	16	5¾
22	19	10	6	78	69	4	6	1	21	–	7	9	3	21	–	16	7½
23	20	8	3	79	70	2	3	1	22	–	7	11	3	22	–	16	9½
24	21	6	–	80	71	–	–	1	23	–	8	–¾	3	23	–	16	11¼
25	22	3	9	81	71	17	9	1	24	–	8	2¾	3	24	–	17	1¼
26	23	1	6	82	72	15	6	1	25	–	8	4¾	3	25	–	17	3¼
27	23	19	3	83	73	13	3	1	26	–	8	6½	3	26	–	17	5
28	24	17	–	84	74	11	–	1	27	–	8	8½	3	27	–	17	7
29	25	14	9	85	75	8	9	2	—	–	8	10½					
30	26	12	6	86	76	6	6	2	1	–	9	–¼	0	1	–	–	1¾
31	27	10	3	87	77	4	3	2	2	–	9	2¼	0	2	–	–	3¾
32	28	8	–	88	78	2	–	2	3	–	9	4	0	3	–	–	5½
33	29	5	9	89	78	19	9	2	4	–	9	6	0	4	–	–	7½
34	30	3	6	90	79	17	6	2	5	–	9	8	0	5	–	–	9½
35	31	1	3	91	80	15	3	2	6	–	9	9¾	0	6	–	–	11¼
36	31	19	–	92	81	13	–	2	7	–	9	11¾	0	7	–	1	1¼
37	32	16	9	93	82	10	9	2	8	–	10	1½	0	8	–	1	3
38	33	14	6	94	83	8	6	2	9	–	10	3½	0	9	–	1	5
39	34	12	3	95	84	6	3	2	10	–	10	5½	0	10	–	1	7
40	35	10	–	96	85	4	–	2	11	–	10	7¼	0	11	–	1	8¾
41	36	7	9	97	86	1	9	2	12	–	10	9¼	0	12	–	1	10¾
42	37	5	6	98	86	19	6	2	13	–	10	11	0	13	–	2	–½
43	38	3	3	99	87	17	3	2	14	–	11	1	0	14	–	2	2½
44	39	1	–	100	88	15	–	2	15	–	11	3	0	15	–	2	4½
45	39	18	9	200	177	10	–	2	16	–	11	4¾	0	16	–	2	6¼
46	40	16	6	300	266	5	–	2	17	–	11	6¾	0	17	–	2	8¼
47	41	14	3	400	355	–	–	2	18	–	11	8½	0	18	–	2	10
48	42	12	–	500	443	15	–	2	19	–	11	10½	0	19	–	3	–
49	43	9	9	600	532	10	–	2	20	–	12	–½	0	20	–	3	2
50	44	7	6	700	621	5	–	2	21	–	12	2¼	0	21	–	3	3¾
51	45	5	3	800	710	–	–	2	22	–	12	4¼	0	22	–	3	5¾
52	46	3	–	900	798	15	–	2	23	–	12	6	0	23	–	3	7½
53	47	–	9	1000	887	10	–	2	24	–	12	8	0	24	–	3	9½
54	47	18	6	2000	1775	–	–	2	25	–	12	10	0	25	–	3	11½
55	48	16	3	3000	2662	10	–	2	26	–	12	11¾	0	26	–	4	1¼
56	49	14	–	4000	3550	–	–	2	27	–	13	1¾	0	27	–	4	3¼

Cwt	£.	*s.*	*d.*	Cwt.	£.	*s.*	*d.*	qr.	lb.	£.	*s.*	*d.*	qr.	lb.	£.	*s.*	*d.*
1	–	18	–	57	51	6	–	1	–	–	4	6	3	–	–	13	6
2	1	16	–	58	52	4	–	1	1	–	4	7¾	3	1	–	13	7¾
3	2	14	–	59	53	2	–	1	2	–	4	9¾	3	2	–	13	9¾
4	3	12	–	60	54	–	–	1	3	–	4	11¾	3	3	–	13	11¾
5	4	10	–	61	54	18	–	1	4	–	5	1½	3	4	–	14	1½
6	5	8	–	62	55	16	–	1	5	–	5	3½	3	5	–	14	3½
7	6	6	–	63	56	14	–	1	6	–	5	5½	3	6	–	14	5½
8	7	4	–	64	57	12	–	1	7	–	5	7½	3	7	–	14	7½
9	8	2	–	65	58	10	–	1	8	–	5	9¼	3	8	–	14	9¼
10	9	–	–	66	59	8	–	1	9	–	5	11¼	3	9	–	14	11¼
11	9	18	–	67	60	6	–	1	10	–	6	1¼	3	10	–	15	1¼
12	10	16	–	68	61	4	–	1	11	–	6	3	3	11	–	15	3
13	11	14	–	69	62	2	–	1	12	–	6	5	3	12	–	15	5
14	12	12	–	70	63	–	–	1	13	–	6	7	3	13	–	15	7
15	13	10	–	71	63	18	–	1	14	–	6	9	3	14	–	15	9
16	14	8	–	72	64	16	–	1	15	–	6	10¾	3	15	–	15	10¾
17	15	6	–	73	65	14	–	1	16	–	7	–¾	3	16	–	16	–¾
18	16	4	–	74	66	12	–	1	17	–	7	2¾	3	17	–	16	2¾
19	17	2	–	75	67	10	–	1	18	–	7	4½	3	18	–	16	4½
20	18	–	–	76	68	8	–	1	19	–	7	6½	3	19	–	16	6½
21	18	18	–	77	69	6	–	1	20	–	7	8½	3	20	–	16	8½
22	19	16	–	78	70	4	–	1	21	–	7	10½	3	21	–	16	10½
23	20	14	–	79	71	2	–	1	22	–	8	–¼	3	22	–	17	–¼
24	21	12	–	80	72	–	–	1	23	–	8	2¼	3	23	–	17	2¼
25	22	10	–	81	72	18	–	1	24	–	8	4¼	3	24	–	17	4¼
26	23	8	–	82	73	16	–	1	25	–	8	6	3	25	–	17	6
27	24	6	–	83	74	14	–	1	26	–	8	8	3	26	–	17	8
28	25	4	–	84	75	12	–	1	27	–	8	10	3	27	–	17	10
29	26	2	–	85	76	10	–	2	—	–	9	–					
30	27	–	–	86	77	8	–	2	1	–	9	1¾	0	1	–	–	1¾
31	27	18	–	87	78	6	–	2	2	–	9	3¾	0	2	–	–	3¾
32	28	16	–	88	79	4	–	2	3	–	9	5¾	0	3	–	–	5¾
33	29	14	–	89	80	2	–	2	4	–	9	7½	0	4	–	–	7½
34	30	12	–	90	81	–	–	2	5	–	9	9½	0	5	–	–	9½
35	31	10	–	91	81	18	–	2	6	–	9	11½	0	6	–	–	11½
36	32	8	–	92	82	16	–	2	7	–	10	1½	0	7	–	1	1½
37	33	6	–	93	83	14	–	2	8	–	10	3¼	0	8	–	1	3¼
38	34	4	–	94	84	12	–	2	9	–	10	5¼	0	9	–	1	5¼
39	35	2	–	95	85	10	–	2	10	–	10	7¼	0	10	–	1	7¼
40	36	–	–	96	86	8	–	2	11	–	10	9	0	11	–	1	9
41	36	18	–	97	87	6	–	2	12	–	10	11	0	12	–	1	11
42	37	16	–	98	88	4	–	2	13	–	11	1	0	13	–	2	1
43	38	14	–	99	89	2	–	2	14	–	11	3	0	14	–	2	3
44	39	12	–	100	90	–	–	2	15	–	11	4¾	0	15	–	2	4¾
45	40	10	–	200	180	–	–	2	16	–	11	6¾	0	16	–	2	6¾
46	41	8	–	300	270	–	–	2	17	–	11	8¾	0	17	–	2	8¾
47	42	6	–	400	360	–	–	2	18	–	11	10½	0	18	–	2	10½
48	43	4	–	500	450	–	–	2	19	–	12	–½	0	19	–	3	–½
49	44	2	–	600	540	–	–	2	20	–	12	2½	0	20	–	3	2½
50	45	–	–	700	630	–	–	2	21	–	12	4½	0	21	–	3	4½
51	45	18	–	800	720	–	–	2	22	–	12	6¼	0	22	–	3	6¼
52	46	16	–	900	810	–	–	2	23	–	12	8¼	0	23	–	3	8¼
53	47	14	–	1000	900	–	–	2	24	–	12	10¼	0	24	–	3	10¼
54	48	12	–	2000	1800	–	–	2	25	–	13	–	0	25	–	4	–
55	49	10	–	3000	2700	–	–	2	26	–	13	2	0	26	–	4	2
56	50	8	–	4000	3600	–	–	2	27	–	13	4	0	27	–	4	4

18*s*. 3*d*. *per Cwt.*

Cwt.	£.	s.	d.	Cwt.	£.	s.	d.
1	–	18	3	57	52	–	3
2	1	16	6	58	52	18	6
3	2	14	9	59	53	16	9
4	3	13	–	60	54	15	–
5	4	11	3	61	55	13	3
6	5	9	6	62	56	11	6
7	6	7	9	63	57	9	9
8	7	6	–	64	58	8	–
9	8	4	3	65	59	6	3
10	9	2	6	66	60	4	6
11	10	–	9	67	61	2	9
12	10	19	–	68	62	1	–
13	11	17	3	69	62	19	3
14	12	15	6	70	63	17	6
15	13	13	9	71	64	15	9
16	14	12	–	72	65	14	–
17	15	10	3	73	66	12	3
18	16	8	6	74	67	10	6
19	17	6	9	75	68	8	9
20	18	5	–	76	69	7	–
21	19	3	3	77	70	5	3
22	20	1	6	78	71	3	6
23	20	19	9	79	72	1	9
24	21	18	–	80	73	–	–
25	22	16	3	81	73	18	3
26	23	14	6	82	74	16	6
27	24	12	9	83	75	14	9
28	25	11	–	84	76	13	–
29	26	9	3	85	77	11	3
30	27	7	6	86	78	9	6
31	28	5	9	87	79	7	9
32	29	4	–	88	80	6	–
33	30	2	3	89	81	4	3
34	31	–	6	90	82	2	6
35	31	18	9	91	83	–	9
36	32	17	–	92	83	19	–
37	33	15	3	93	84	17	3
38	34	13	6	94	85	15	6
39	35	11	9	95	86	13	9
40	36	10	–	96	87	12	–
41	37	8	3	97	88	10	3
42	38	6	6	98	89	8	6
43	39	4	9	99	90	6	9
44	40	3	–	100	91	5	–
45	41	1	3	200	182	10	–
46	41	19	6	300	273	15	–
47	42	17	9	400	365	–	–
48	43	16	–	500	456	5	–
49	44	14	3	600	547	10	–
50	45	12	6	700	638	15	–
51	46	10	9	800	730	–	–
52	47	9	–	900	821	5	–
53	48	7	3	1000	912	10	–
54	49	5	6	2000	1825	–	–
55	50	3	9	3000	2737	10	–
56	51	2	–	4000	3650	–	–

qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	–	4	6¾	3	–	–	13	8¼
1	1	–	4	8½	3	1	–	13	10
1	2	–	4	10½	3	2	–	14	–
1	3	–	5	–½	3	3	–	14	2
1	4	–	5	2½	3	4	–	14	4
1	5	–	5	4½	3	5	–	14	6
1	6	–	5	6¼	3	6	–	14	7¾
1	7	–	5	8¼	3	7	–	14	9¾
1	8	–	5	10¼	3	8	–	14	11¾
1	9	–	6	–¼	3	9	–	15	1¾
1	10	–	6	2¼	3	10	–	15	3¾
1	11	–	6	4¼	3	11	–	15	5¾
1	12	–	6	6	3	12	–	15	7½
1	13	–	6	8	3	13	–	15	9½
1	14	–	6	10	3	14	–	15	11½
1	15	–	7	–	3	15	–	16	1½
1	16	–	7	2	3	16	–	16	3½
1	17	–	7	3¾	3	17	–	16	5¼
1	18	–	7	5¾	3	18	–	16	7¼
1	19	–	7	7¾	3	19	–	16	9¼
1	20	–	7	9¾	3	20	–	16	11¼
1	21	–	7	11¾	3	21	–	17	1¼
1	22	–	8	1¾	3	22	–	17	3¼
1	23	–	8	3½	3	23	–	17	5
1	24	–	8	5½	3	24	–	17	7
1	25	–	8	7½	3	25	–	17	9
1	26	–	8	9½	3	26	–	17	11
1	27	–	8	11½	3	27	–	18	1
2	—	–	9	1½					
2	1	–	9	3¼	0	1	–	–	1¾
2	2	–	9	5¼	0	2	–	–	3¾
2	3	–	9	7¼	0	3	–	–	5¾
2	4	–	9	9¼	0	4	–	–	7¾
2	5	–	9	11¼	0	5	–	–	9¾
2	6	–	10	1	0	6	–	–	11½
2	7	–	10	3	0	7	–	1	1½
2	8	–	10	5	0	8	–	1	3½
2	9	–	10	7	0	9	–	1	5½
2	10	–	10	9	0	10	–	1	7½
2	11	–	10	11	0	11	–	1	9½
2	12	–	11	–¾	0	12	–	1	11¼
2	13	–	11	2¾	0	13	–	2	1¼
2	14	–	11	4¾	0	14	–	2	3¼
2	15	–	11	6¾	0	15	–	2	5¼
2	16	–	11	8¾	0	16	–	2	7¼
2	17	–	11	10½	0	17	–	2	9
2	18	–	12	–½	0	18	–	2	11
2	19	–	12	2½	0	19	–	3	1
2	20	–	12	4½	0	20	–	3	3
2	21	–	12	6½	0	21	–	3	5
2	22	–	12	8½	0	22	–	3	7
2	23	–	12	10¼	0	23	–	3	8¾
2	24	–	13	–¼	0	24	–	3	10¾
2	25	–	13	2¼	0	25	–	4	–¾
2	26	–	13	4¼	0	26	–	4	2¾
2	27	–	13	6¼	0	27	–	4	4¾

18*s*. 6*d*. *per Cwt.*

£18. 10*s*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	18	6	57	52	14	6	1	–	–	4	7½	3	–	–	13	10½
2	1	17	–	58	53	13	–	1	1	–	4	9¼	3	1	–	14	–¼
3	2	15	6	59	54	11	6	1	2	–	4	11¼	3	2	–	14	2¼
4	3	14	–	60	55	10	–	1	3	–	5	1¼	3	3	–	14	4¼
5	4	12	6	61	56	8	6	1	4	–	5	3¼	3	4	–	14	6¼
6	5	11	–	62	57	7	–	1	5	–	5	5¼	3	5	–	14	8¼
7	6	9	6	63	58	5	6	1	6	–	5	7¼	3	6	–	14	10¼
8	7	8	–	64	59	4	–	1	7	–	5	9¼	3	7	–	15	–¼
9	8	6	6	65	60	2	6	1	8	–	5	11¼	3	8	–	15	2¼
10	9	5	–	66	61	1	–	1	9	–	6	1¼	3	9	–	15	4¼
11	10	3	6	67	61	19	6	1	10	–	6	3¼	3	10	–	15	6¼
12	11	2	–	68	62	18	–	1	11	–	6	5¼	3	11	–	15	8¼
13	12	–	6	69	63	16	6	1	12	–	6	7¼	3	12	–	15	10¼
14	12	19	–	70	64	15	–	1	13	–	6	9¼	3	13	–	16	–¼
15	13	17	6	71	65	13	6	1	14	–	6	11¼	3	14	–	16	2¼
16	14	16	–	72	66	12	–	1	15	–	7	1	3	15	–	16	4
17	15	14	6	73	67	10	6	1	16	–	7	3	3	16	–	16	6
18	16	13	–	74	68	9	–	1	17	–	7	5	3	17	–	16	8
19	17	11	6	75	69	7	6	1	18	–	7	7	3	18	–	16	10
20	18	10	–	76	70	6	–	1	19	–	7	9	3	19	–	17	–
21	19	8	6	77	71	4	6	1	20	–	7	11	3	20	–	17	2
22	20	7	–	78	72	3	–	1	21	–	8	1	3	21	–	17	4
23	21	5	6	79	73	1	6	1	22	–	8	3	3	22	–	17	6
24	22	4	–	80	74	–	–	1	23	–	8	5	3	23	–	17	8
25	23	2	6	81	74	18	6	1	24	–	8	7	3	24	–	17	10
26	24	1	–	82	75	17	–	1	25	–	8	9	3	25	–	18	–
27	24	19	6	83	76	15	6	1	26	–	8	11	3	26	–	18	2
28	25	18	–	84	77	14	–	1	27	–	9	1	3	27	–	18	4
29	26	16	6	85	78	12	6	2	—	–	9	3					
30	27	15	–	86	79	11	–	2	1	–	9	4¾	0	1	–	–	1¾
31	28	13	6	87	80	9	6	2	2	–	9	6¾	0	2	–	–	3¾
32	29	12	–	88	81	8	–	2	3	–	9	8¾	0	3	–	–	5¾
33	30	10	6	89	82	6	6	2	4	–	9	10¾	0	4	–	–	7¾
34	31	9	–	90	83	5	–	2	5	–	10	–¾	0	5	–	–	9¾
35	32	7	6	91	84	3	6	2	6	–	10	2¾	0	6	–	–	11¾
36	33	6	–	92	85	2	–	2	7	–	10	4¾	0	7	–	1	1¾
37	34	4	6	93	86	–	6	2	8	–	10	6¾	0	8	–	1	3¾
38	35	3	–	94	86	19	–	2	9	–	10	8¾	0	9	–	1	5¾
39	36	1	6	95	87	17	6	2	10	–	10	10¾	0	10	–	1	7¾
40	37	–	–	96	88	16	–	2	11	–	11	–¾	0	11	–	1	9¾
41	37	18	6	97	89	14	6	2	12	–	11	2¾	0	12	–	1	11¾
42	38	17	–	98	90	13	–	2	13	–	11	4¾	0	13	–	2	1¾
43	39	15	6	99	91	11	6	2	14	–	11	6¾	0	14	–	2	3¾
44	40	14	–	100	92	10	–	2	15	–	11	8½	0	15	–	2	5½
45	41	12	6	200	185	–	–	2	16	–	11	10½	0	16	–	2	7½
46	42	11	–	300	277	10	–	2	17	–	12	–½	0	17	–	2	9½
47	43	9	6	400	370	–	–	2	18	–	12	2½	0	18	–	2	11½
48	44	8	–	500	462	10	–	2	19	–	12	4½	0	19	–	3	1½
49	45	6	6	600	555	–	–	2	20	–	12	6½	0	20	–	3	3½
50	46	5	–	700	647	10	–	2	21	–	12	8½	0	21	–	3	5½
51	47	3	6	800	740	–	–	2	22	–	12	10½	0	22	–	3	7½
52	48	2	–	900	832	10	–	2	23	–	13	–½	0	23	–	3	9½
53	49	–	6	1000	925	–	–	2	24	–	13	2½	0	24	–	3	11½
54	49	19	–	2000	1850	–	–	2	25	–	13	4½	0	25	–	4	1½
55	50	17	6	3000	2775	–	–	2	26	–	13	6½	0	26	–	4	3½
56	51	16	–	4000	3700	–	–	2	27	–	13	8½	0	27	–	4	5½

£18. 13s. 4d. per Ton. 2d. per lb. 18s. 8d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	18	8	57	53	4	–	1	–	–	4	8	3	–	–	14	–
2	1	17	4	58	54	2	8	1	1	–	4	10	3	1	–	14	2
3	2	16	–	59	55	1	4	1	2	–	5	–	3	2	–	14	4
4	3	14	8	60	56	–	–	1	3	–	5	2	3	3	–	14	6
5	4	13	4	61	56	18	8	1	4	–	5	4	3	4	–	14	8
6	5	12	–	62	57	17	4	1	5	–	5	6	3	5	–	14	10
7	6	10	8	63	58	16	–	1	6	–	5	8	3	6	–	15	–
8	7	9	4	64	59	14	8	1	7	–	5	10	3	7	–	15	2
9	8	8	–	65	60	13	4	1	8	–	6	–	3	8	–	15	4
10	9	6	8	66	61	12	–	1	9	–	6	2	3	9	–	15	6
11	10	5	4	67	62	10	8	1	10	–	6	4	3	10	–	15	8
12	11	4	–	68	63	9	4	1	11	–	6	6	3	11	–	15	10
13	12	2	8	69	64	8	–	1	12	–	6	8	3	12	–	16	–
14	13	1	4	70	65	6	8	1	13	–	6	10	3	13	–	16	2
15	14	–	–	71	66	5	4	1	14	–	7	–	3	14	–	16	4
16	14	18	8	72	67	4	–	1	15	–	7	2	3	15	–	16	6
17	15	17	4	73	68	2	8	1	16	–	7	4	3	16	–	16	8
18	16	16	–	74	69	1	4	1	17	–	7	6	3	17	–	16	10
19	17	14	8	75	70	–	–	1	18	–	7	8	3	18	–	17	–
20	18	13	4	76	70	18	8	1	19	–	7	10	3	19	–	17	2
21	19	12	–	77	71	17	4	1	20	–	8	–	3	20	–	17	4
22	20	10	8	78	72	16	–	1	21	–	8	2	3	21	–	17	6
23	21	9	4	79	73	14	8	1	22	–	8	4	3	22	–	17	8
24	22	8	–	80	74	13	4	1	23	–	8	6	3	23	–	17	10
25	23	6	8	81	75	12	–	1	24	–	8	8	3	24	–	18	–
26	24	5	4	82	76	10	8	1	25	–	8	10	3	25	–	18	2
27	25	4	–	83	77	9	4	1	26	–	9	–	3	26	–	18	4
28	26	2	8	84	78	8	–	1	27	–	9	2	3	27	–	18	6
29	27	1	4	85	79	6	8	2	—	–	9	4					
30	28	–	–	86	80	5	4	2	1	–	9	6	0	1	–	–	2
31	28	18	8	87	81	4	–	2	2	–	9	8	0	2	–	–	4
32	29	17	4	88	82	2	8	2	3	–	9	10	0	3	–	–	6
33	30	16	–	89	83	1	4	2	4	–	10	–	0	4	–	–	8
34	31	14	8	90	84	–	–	2	5	–	10	2	0	5	–	–	10
35	32	13	4	91	84	18	8	2	6	–	10	4	0	6	–	1	–
36	33	12	–	92	85	17	4	2	7	–	10	6	0	7	–	1	2
37	34	10	8	93	86	16	–	2	8	–	10	8	0	8	–	1	4
38	35	9	4	94	87	14	8	2	9	–	10	10	0	9	–	1	6
39	36	8	–	95	88	13	4	2	10	–	11	–	0	10	–	1	8
40	37	6	8	96	89	12	–	2	11	–	11	2	0	11	–	1	10
41	38	5	4	97	90	10	8	2	12	–	11	4	0	12	–	2	–
42	39	4	–	98	91	9	4	2	13	–	11	6	0	13	–	2	2
43	40	2	8	99	92	8	–	2	14	–	11	8	0	14	–	2	4
44	41	1	4	100	93	6	8	2	15	–	11	10	0	15	–	2	6
45	42	–	–	200	186	13	4	2	16	–	12	–	0	16	–	2	8
46	42	18	8	300	280	–	–	2	17	–	12	2	0	17	–	2	10
47	43	17	4	400	373	6	8	2	18	–	12	4	0	18	–	3	–
48	44	16	–	500	466	13	4	2	19	–	12	6	0	19	–	3	2
49	45	14	8	600	560	–	–	2	20	–	12	8	0	20	–	3	4
50	46	13	4	700	653	6	8	2	21	–	12	10	0	21	–	3	6
51	47	12	–	800	746	13	4	2	22	–	13	–	0	22	–	3	8
52	48	10	8	900	840	–	–	2	23	–	13	2	0	23	–	3	10
53	49	9	4	1000	933	6	8	2	24	–	13	4	0	24	–	4	–
54	50	8	–	2000	1866	13	4	2	25	–	13	6	0	25	–	4	2
55	51	6	8	3000	2800	–	–	2	26	–	13	8	0	26	–	4	4
56	52	5	4	4000	3733	6	8	2	27	–	13	10	0	27	–	4	6

18*s*. 9*d*. *per Cwt*.

***£*18. 15*s*. *per Ton*.**

Cwt	£.	*s.*	*d.*	Cwt.	£.	*s.*	*d.*	qr.	lb.	£.	*s.*	*d.*	qr.	lb.	£.	*s.*	*d.*
1	–	18	9	57	53	8	9	1	–	–	4	8¼	3	–	–	14	–¾
2	1	17	6	58	54	7	6	1	1	–	4	10¼	3	1	–	14	2¾
3	2	16	3	59	55	6	3	1	2	–	5	–¼	3	2	–	14	4¾
4	3	15	–	60	56	5	–	1	3	–	5	2¼	3	3	–	14	6¾
5	4	13	9	61	57	3	9	1	4	–	5	4¼	3	4	–	14	8¾
6	5	12	6	62	58	2	6	1	5	–	5	6¼	3	5	–	14	10¾
7	6	11	3	63	59	1	3	1	6	–	5	8¼	3	6	–	15	–¾
8	7	10	–	64	60	–	–	1	7	–	5	10¼	3	7	–	15	2¾
9	8	8	9	65	60	18	9	1	8	–	6	–¼	3	8	–	15	4¾
10	9	7	6	66	61	17	6	1	9	–	6	2¼	3	9	–	15	6¾
11	10	6	3	67	62	16	3	1	10	–	6	4¼	3	10	–	15	8¾
12	11	5	–	68	63	15	–	1	11	–	6	6¼	3	11	–	15	10¾
13	12	3	9	69	64	13	9	1	12	–	6	8¼	3	12	–	16	–¾
14	13	2	6	70	65	12	6	1	13	–	6	10¼	3	13	–	16	2¾
15	14	1	3	71	66	11	3	1	14	–	7	–¼	3	14	–	16	4¾
16	15	–	–	72	67	10	–	1	15	–	7	2¼	3	15	–	16	6¾
17	15	18	9	73	68	8	9	1	16	–	7	4¼	3	16	–	16	8¾
18	16	17	6	74	69	7	6	1	17	–	7	6¼	3	17	–	16	10¾
19	17	16	3	75	70	6	3	1	18	–	7	8¼	3	18	–	17	–¾
20	18	15	–	76	71	5	–	1	19	–	7	10¼	3	19	–	17	2¾
21	19	13	9	77	72	3	9	1	20	–	8	–¼	3	20	–	17	4¾
22	20	12	6	78	73	2	6	1	21	–	8	2¼	3	21	–	17	6¾
23	21	11	3	79	74	1	3	1	22	–	8	4¼	3	22	–	17	8¾
24	22	10	–	80	75	–	–	1	23	–	8	6¼	3	23	–	17	10¾
25	23	8	9	81	75	18	9	1	24	–	8	8¼	3	24	–	18	–¾
26	24	7	6	82	76	17	6	1	25	–	8	10¼	3	25	–	18	2¾
27	25	6	3	83	77	16	3	1	26	–	9	–¼	3	26	–	18	4¾
28	26	5	–	84	78	15	–	1	27	–	9	2¼	3	27	–	18	6¾
29	27	3	9	85	79	13	9	2	—	–	9	4½					
30	28	2	6	86	80	12	6	2	1	–	9	6½	0	1	–	–	2
31	29	1	3	87	81	11	3	2	2	–	9	8½	0	2	–	–	4
32	30	–	–	88	82	10	–	2	3	–	9	10½	0	3	–	–	6
33	30	18	9	89	83	8	9	2	4	–	10	–½	0	4	–	–	8
34	31	17	6	90	84	7	6	2	5	–	10	2½	0	5	–	–	10
35	32	16	3	91	85	6	3	2	6	–	10	4½	0	6	–	1	–
36	33	15	–	92	86	5	–	2	7	–	10	6½	0	7	–	1	2
37	34	13	9	93	87	3	9	2	8	–	10	8½	0	8	–	1	4
38	35	12	6	94	88	2	6	2	9	–	10	10½	0	9	–	1	6
39	36	11	3	95	89	1	3	2	10	–	11	–½	0	10	–	1	8
40	37	10	–	96	90	–	–	2	11	–	11	2½	0	11	–	1	10
41	38	8	9	97	90	18	9	2	12	–	11	4½	0	12	–	2	–
42	39	7	6	98	91	17	6	2	13	–	11	6½	0	13	–	2	2
43	40	6	3	99	92	16	3	2	14	–	11	8½	0	14	–	2	4
44	41	5	–	100	93	15	–	2	15	–	11	10½	0	15	–	2	6
45	42	3	9	200	187	10	–	2	16	–	12	–½	0	16	–	2	8
46	43	2	6	300	281	5	–	2	17	–	12	2½	0	17	–	2	10
47	44	1	3	400	375	–	–	2	18	–	12	4½	0	18	–	3	–
48	45	–	–	500	468	15	–	2	19	–	12	6½	0	19	–	3	2
49	45	18	9	600	562	10	–	2	20	–	12	8½	0	20	–	3	4
50	46	17	6	700	656	5	–	2	21	–	12	10½	0	21	–	3	6
51	47	16	3	800	750	–	–	2	22	–	13	–½	0	22	–	3	8
52	48	15	–	900	843	15	–	2	23	–	13	2½	0	23	–	3	10
53	49	13	9	1000	937	10	–	2	24	–	13	4½	0	24	–	4	–
54	50	12	6	2000	1875	–	–	2	25	–	13	6½	0	25	–	4	2
55	51	11	3	3000	2812	10	–	2	26	–	13	8½	0	26	–	4	4
56	52	10	–	4000	3750	–	–	2	27	–	13	10½	0	27	–	4	6

£19. per Ton. 19*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	19	–	57	54	3	–	1	–	–	4	9	3	–	–	14	3
2	1	18	–	58	55	2	–	1	1	–	4	11	3	1	–	14	5
3	2	17	–	59	56	1	–	1	2	–	5	1	3	2	–	14	7
4	3	16	–	60	57	–	–	1	3	–	5	3	3	3	–	14	9
5	4	15	–	61	57	19	–	1	4	–	5	5	3	4	–	14	11
6	5	14	–	62	58	18	–	1	5	–	5	7	3	5	–	15	1
7	6	13	–	63	59	17	–	1	6	–	5	9	3	6	–	15	3
8	7	12	–	64	60	16	–	1	7	–	5	11¼	3	7	–	15	5¼
9	8	11	–	65	61	15	–	1	8	–	6	1¼	3	8	–	15	7¼
10	9	10	–	66	62	14	–	1	9	–	6	3¼	3	9	–	15	9¼
11	10	9	–	67	63	13	–	1	10	–	6	5¼	3	10	–	15	11¼
12	11	8	–	68	64	12	–	1	11	–	6	7¼	3	11	–	16	1¼
13	12	7	–	69	65	11	–	1	12	–	6	9¼	3	12	–	16	3¼
14	13	6	–	70	66	10	–	1	13	–	6	11¼	3	13	–	16	5¼
15	14	5	–	71	67	9	–	1	14	–	7	1½	3	14	–	16	7½
16	15	4	–	72	68	8	–	1	15	–	7	3½	3	15	–	16	9½
17	16	3	–	73	69	7	–	1	16	–	7	5½	3	16	–	16	11½
18	17	2	–	74	70	6	–	1	17	–	7	7½	3	17	–	17	1½
19	18	1	–	75	71	5	–	1	18	–	7	9½	3	18	–	17	3½
20	19	–	–	76	72	4	–	1	19	–	7	11½	3	19	–	17	5½
21	19	19	–	77	73	3	–	1	20	–	8	1½	3	20	–	17	7½
22	20	18	–	78	74	2	–	1	21	–	8	3¾	3	21	–	17	9¾
23	21	17	–	79	75	1	–	1	22	–	8	5¾	3	22	–	17	11¾
24	22	16	–	80	76	–	–	1	23	–	8	7¾	3	23	–	18	1¾
25	23	15	–	81	76	19	–	1	24	–	8	9¾	3	24	–	18	3¾
26	24	14	–	82	77	18	–	1	25	–	8	11¾	3	25	–	18	5¾
27	25	13	–	83	78	17	–	1	26	–	9	1¾	3	26	–	18	7¾
28	26	12	–	84	79	16	–	1	27	–	9	3¾	3	27	–	18	9¾
29	27	11	–	85	80	15	–	2	—	–	9	6					
30	28	10	–	86	81	14	–	2	1	–	9	8	0	1	–	–	2
31	29	9	–	87	82	13	–	2	2	–	9	10	0	2	–	–	4
32	30	8	–	88	83	12	–	2	3	–	10	–	0	3	–	–	6
33	31	7	–	89	84	11	–	2	4	–	10	2	0	4	–	–	8
34	32	6	–	90	85	10	–	2	5	–	10	4	0	5	–	–	10
35	33	5	–	91	86	9	–	2	6	–	10	6	0	6	–	1	–
36	34	4	–	92	87	8	–	2	7	–	10	8¼	0	7	–	1	2¼
37	35	3	–	93	88	7	–	2	8	–	10	10¼	0	8	–	1	4¼
38	36	2	–	94	89	6	–	2	9	–	11	–¼	0	9	–	1	6¼
39	37	1	–	95	90	5	–	2	10	–	11	2¼	0	10	–	1	8¼
40	38	–	–	96	91	4	–	2	11	–	11	4¼	0	11	–	1	10¼
41	38	19	–	97	92	3	–	2	12	–	11	6¼	0	12	–	2	–¼
42	39	18	–	98	93	2	–	2	13	–	11	8¼	0	13	–	2	2¼
43	40	17	–	99	94	1	–	2	14	–	11	10½	0	14	–	2	4½
44	41	16	–	100	95	–	–	2	15	–	12	–½	0	15	–	2	6½
45	42	15	–	200	190	–	–	2	16	–	12	2½	0	16	–	2	8½
46	43	14	–	300	285	–	–	2	17	–	12	4½	0	17	–	2	10½
47	44	13	–	400	380	–	–	2	18	–	12	6½	0	18	–	3	–½
48	45	12	–	500	475	–	–	2	19	–	12	8½	0	19	–	3	2½
49	46	11	–	600	570	–	–	2	20	–	12	10½	0	20	–	3	4½
50	47	10	–	700	665	–	–	2	21	–	13	–¾	0	21	–	3	6¾
51	48	9	–	800	760	–	–	2	22	–	13	2¾	0	22	–	3	8¾
52	49	8	–	900	855	–	–	2	23	–	13	4¾	0	23	–	3	10¾
53	50	7	–	1000	950	–	–	2	24	–	13	6¾	0	24	–	4	–¾
54	51	6	–	2000	1900	–	–	2	25	–	13	8¾	0	25	–	4	2¾
55	52	5	–	3000	2850	–	–	2	26	–	13	10¾	0	26	–	4	4¾
56	53	4	–	4000	3800	–	–	2	27	–	14	–¾	0	27	–	4	6¾

19s. 3d. per Cwt. **£19. 5s. *per Ton.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	19	3	57	54	17	3	1	–	–	4	9¾	3	–	–	14	5¼
2	1	18	6	58	55	16	6	1	1	–	4	11¾	3	1	–	14	7¼
3	2	17	9	59	56	15	9	1	2	–	5	1¾	3	2	–	14	9¼
4	3	17	–	60	57	15	–	1	3	–	5	3¾	3	3	–	14	11¼
5	4	16	3	61	58	14	3	1	4	–	5	6	3	4	–	15	1½
6	5	15	6	62	59	13	6	1	5	–	5	8	3	5	–	15	3½
7	6	14	9	63	60	12	9	1	6	–	5	10	3	6	–	15	5½
8	7	14	–	64	61	12	–	1	7	–	6	–	3	7	–	15	7½
9	8	13	3	65	62	11	3	1	8	–	6	2¼	3	8	–	15	9¾
10	9	12	6	66	63	10	6	1	9	–	6	4¼	3	9	–	15	11¾
11	10	11	9	67	64	9	9	1	10	–	6	6¼	3	10	–	16	1¾
12	11	11	–	68	65	9	–	1	11	–	6	8¼	3	11	–	16	3¾
13	12	10	3	69	66	8	3	1	12	–	6	10½	3	12	–	16	6
14	13	9	6	70	67	7	6	1	13	–	7	–½	3	13	–	16	8
15	14	8	9	71	68	6	9	1	14	–	7	2½	3	14	–	16	10
16	15	8	–	72	69	6	–	1	15	–	7	4½	3	15	–	17	–
17	16	7	3	73	70	5	3	1	16	–	7	6¾	3	16	–	17	2¼
18	17	6	6	74	71	4	6	1	17	–	7	8¾	3	17	–	17	4¼
19	18	5	9	75	72	3	9	1	18	–	7	10¾	3	18	–	17	6¼
20	19	5	–	76	73	3	–	1	19	–	8	–¾	3	19	–	17	8¼
21	20	4	3	77	74	2	3	1	20	–	8	3	3	20	–	17	10½
22	21	3	6	78	75	1	6	1	21	–	8	5	3	21	–	18	–½
23	22	2	9	79	76	–	9	1	22	–	8	7	3	22	–	18	2½
24	23	2	–	80	77	–	–	1	23	–	8	9	3	23	–	18	4½
25	24	1	3	81	77	19	3	1	24	–	8	11¼	3	24	–	18	6¾
26	25	–	6	82	78	18	6	1	25	–	9	1¼	3	25	–	18	8¾
27	25	19	9	83	79	17	9	1	26	–	9	3¼	3	26	–	18	10¾
28	26	19	–	84	80	17	–	1	27	–	9	5¼	3	27	–	19	–¾
29	27	18	3	85	81	16	3	2	—	–	9	7½	—	—	—	—	—
30	28	17	6	86	82	15	6	2	1	–	9	9½	0	1	–	–	2
31	29	16	9	87	83	14	9	2	2	–	9	11½	0	2	–	–	4
32	30	16	–	88	84	14	–	2	3	–	10	1½	0	3	–	–	6
33	31	15	3	89	85	13	3	2	4	–	10	3¾	0	4	–	–	8¼
34	32	14	6	90	86	12	6	2	5	–	10	5¾	0	5	–	–	10¼
35	33	13	9	91	87	11	9	2	6	–	10	7¾	0	6	–	1	–¼
36	34	13	–	92	88	11	–	2	7	–	10	9¾	0	7	–	1	2¼
37	35	12	3	93	89	10	3	2	8	–	11	–	0	8	–	1	4½
38	36	11	6	94	90	9	6	2	9	–	11	2	0	9	–	1	6½
39	37	10	9	95	91	8	9	2	10	–	11	4	0	10	–	1	8½
40	38	10	–	96	92	8	–	2	11	–	11	6	0	11	–	1	10½
41	39	9	3	97	93	7	3	2	12	–	11	8¼	0	12	–	2	–¾
42	40	8	6	98	94	6	6	2	13	–	11	10¼	0	13	–	2	2¾
43	41	7	9	99	95	5	9	2	14	–	12	–¼	0	14	–	2	4¾
44	42	7	–	100	96	5	–	2	15	–	12	2¼	0	15	–	2	6¾
45	43	6	3	200	192	10	–	2	16	–	12	4½	0	16	–	2	9
46	44	5	6	300	288	15	–	2	17	–	12	6½	0	17	–	2	11
47	45	4	9	400	385	–	–	2	18	–	12	8½	0	18	–	3	1
48	46	4	–	500	481	5	–	2	19	–	12	10½	0	19	–	3	3
49	47	3	3	600	577	10	–	2	20	–	13	–¾	0	20	–	3	5¼
50	48	2	6	700	673	15	–	2	21	–	13	2¾	0	21	–	3	7¼
51	49	1	9	800	770	–	–	2	22	–	13	4¾	0	22	–	3	9¼
52	50	1	–	900	866	5	–	2	23	–	13	6¾	0	23	–	3	11¼
53	51	–	3	1000	962	10	–	2	24	–	13	9	0	24	–	4	1½
54	51	19	6	2000	1925	–	–	2	25	–	13	11	0	25	–	4	3½
55	52	18	9	3000	2887	10	–	2	26	–	14	1	0	26	–	4	5½
56	53	18	–	4000	3850	–	–	2	27	–	14	3	0	27	–	4	7½

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	–	19	6	57	55	11	6	1	–	–	4	10½	3	–	–	14	7½
2	1	19	–	58	56	11	–	1	1	–	5	–½	3	1	–	14	9½
3	2	18	6	59	57	10	6	1	2	–	5	2½	3	2	–	14	11½
4	3	18	–	60	58	10	–	1	3	–	5	4¾	3	3	–	15	1¾
5	4	17	6	61	59	9	6	1	4	–	5	6¾	3	4	–	15	3¾
6	5	17	–	62	60	9	–	1	5	–	5	8¾	3	5	–	15	5¾
7	6	16	6	63	61	8	6	1	6	–	5	11	3	6	–	15	8
8	7	16	–	64	62	8	–	1	7	–	6	1	3	7	–	15	10
9	8	15	6	65	63	7	6	1	8	–	6	3	3	8	–	16	–
10	9	15	–	66	64	7	–	1	9	–	6	5¼	3	9	–	16	2¼
11	10	14	6	67	65	6	6	1	10	–	6	7¼	3	10	–	16	4¼
12	11	14	–	68	66	6	–	1	11	–	6	9¼	3	11	–	16	6¼
13	12	13	6	69	67	5	6	1	12	–	6	11½	3	12	–	16	8½
14	13	13	–	70	68	5	–	1	13	–	7	1½	3	13	–	16	10½
15	14	12	6	71	69	4	6	1	14	–	7	3¾	3	14	–	17	–¾
16	15	12	–	72	70	4	–	1	15	–	7	5¾	3	15	–	17	2¾
17	16	11	6	73	71	3	6	1	16	–	7	7¾	3	16	–	17	4¾
18	17	11	–	74	72	3	–	1	17	–	7	10	3	17	–	17	7
19	18	10	6	75	73	2	6	1	18	–	8	–	3	18	–	17	9
20	19	10	–	76	74	2	–	1	19	–	8	2	3	19	–	17	11
21	20	9	6	77	75	1	6	1	20	–	8	4¼	3	20	–	18	1¼
22	21	9	–	78	76	1	–	1	21	–	8	6¼	3	21	–	18	3¼
23	22	8	6	79	77	–	6	1	22	–	8	8¼	3	22	–	18	5¼
24	23	8	–	80	78	–	–	1	23	–	8	10½	3	23	–	18	7½
25	24	7	6	81	78	19	6	1	24	–	9	–½	3	24	–	18	9½
26	25	7	–	82	79	19	–	1	25	–	9	2½	3	25	–	18	11½
27	26	6	6	83	80	18	6	1	26	–	9	4¾	3	26	–	19	1¾
28	27	6	–	84	81	18	–	1	27	–	9	6¾	3	27	–	19	3¾
29	28	5	6	85	82	17	6	2	—	–	9	9					
30	29	5	–	86	83	17	–	2	1	–	9	11	0	1	–	–	2
31	30	4	6	87	84	16	6	2	2	–	10	1	0	2	–	–	4
32	31	4	–	88	85	16	–	2	3	–	10	3¼	0	3	–	–	6¼
33	32	3	6	89	86	15	6	2	4	–	10	5¼	0	4	–	–	8¼
34	33	3	–	90	87	15	–	2	5	–	10	7¼	0	5	–	–	10¼
35	34	2	6	91	88	14	6	2	6	–	10	9½	0	6	–	1	–½
36	35	2	–	92	89	14	–	2	7	–	10	11½	0	7	–	1	2½
37	36	1	6	93	90	13	6	2	8	–	11	1½	0	8	–	1	4½
38	37	1	–	94	91	13	–	2	9	–	11	3¾	0	9	–	1	6¾
39	38	–	6	95	92	12	6	2	10	–	11	5¾	0	10	–	1	8¾
40	39	–	–	96	93	12	–	2	11	–	11	7¾	0	11	–	1	10¾
41	39	19	6	97	94	11	6	2	12	–	11	10	0	12	–	2	1
42	40	19	–	98	95	11	–	2	13	–	12	–	0	13	–	2	3
43	41	18	6	99	96	10	6	2	14	–	12	2¼	0	14	–	2	5¼
44	42	18	–	100	97	10	–	2	15	–	12	4¼	0	15	–	2	7¼
45	43	17	6	200	195	–	–	2	16	–	12	6¼	0	16	–	2	9¼
46	44	17	–	300	292	10	–	2	17	–	12	8½	0	17	–	2	11½
47	45	16	6	400	390	–	–	2	18	–	12	10½	0	18	–	3	1½
48	46	16	–	500	487	10	–	2	19	–	13	–½	0	19	–	3	3½
49	47	15	6	600	585	–	–	2	20	–	13	2¾	0	20	–	3	5¾
50	48	15	–	700	682	10	–	2	21	–	13	4¾	0	21	–	3	7¾
51	49	14	6	800	780	–	–	2	22	–	13	6¾	0	22	–	3	9¾
52	50	14	–	900	877	10	–	2	23	–	13	9	0	23	–	4	–
53	51	13	6	1000	975	–	–	2	24	–	13	11	0	24	–	4	2
54	52	13	–	2000	1950	–	–	2	25	–	14	1	0	25	–	4	4
55	53	12	6	3000	2925	–	–	2	26	–	14	3¼	0	26	–	4	6¼
56	54	12	–	4000	3900	–	–	2	27	–	14	5¼	0	27	–	4	8¼

19*s*. 9*d*. *per Cwt*.

£19. 15*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	19	9	57	56	5	9	1	–	–	4	11¼	3	–	–	14	9¾
2	1	19	6	58	57	5	6	1	1	–	5	1¼	3	1	–	14	11¾
3	2	19	3	59	58	5	3	1	2	–	5	3¼	3	2	–	15	1¾
4	3	19	–	60	59	5	–	1	3	–	5	5½	3	3	–	15	4
5	4	18	9	61	60	4	9	1	4	–	5	7½	3	4	–	15	6
6	5	18	6	62	61	4	6	1	5	–	5	9¾	3	5	–	15	8¼
7	6	18	3	63	62	4	3	1	6	–	5	11¾	3	6	–	15	10¼
8	7	18	–	64	63	4	–	1	7	–	6	2	3	7	–	16	–½
9	8	17	9	65	64	3	9	1	8	–	6	4	3	8	–	16	2½
10	9	17	6	66	65	3	6	1	9	–	6	6¼	3	9	–	16	4¾
11	10	17	3	67	66	3	3	1	10	–	6	8¼	3	10	–	16	6¾
12	11	17	–	68	67	3	–	1	11	–	6	10½	3	11	–	16	9
13	12	16	9	69	68	2	9	1	12	–	7	–½	3	12	–	16	11
14	13	16	6	70	69	2	6	1	13	–	7	2¾	3	13	–	17	1¼
15	14	16	3	71	70	2	3	1	14	–	7	4¾	3	14	–	17	3¼
16	15	16	–	72	71	2	–	1	15	–	7	6¾	3	15	–	17	5¼
17	16	15	9	73	72	1	9	1	16	–	7	9	3	16	–	17	7½
18	17	15	6	74	73	1	6	1	17	–	7	11	3	17	–	17	9½
19	18	15	3	75	74	1	3	1	18	–	8	1¼	3	18	–	17	11¾
20	19	15	–	76	75	1	–	1	19	–	8	3¼	3	19	–	18	1¾
21	20	14	9	77	76	–	9	1	20	–	8	5½	3	20	–	18	4
22	21	14	6	78	77	–	6	1	21	–	8	7½	3	21	–	18	6
23	22	14	3	79	78	–	3	1	22	–	8	9¾	3	22	–	18	8¼
24	23	14	–	80	79	–	–	1	23	–	8	11¾	3	23	–	18	10¼
25	24	13	9	81	79	19	9	1	24	–	9	2	3	24	–	19	–½
26	25	13	6	82	80	19	6	1	25	–	9	4	3	25	–	19	2½
27	26	13	3	83	81	19	3	1	26	–	9	6¼	3	26	–	19	4¾
28	27	13	–	84	82	19	–	1	27	–	9	8¼	3	27	–	19	6¾
29	28	12	9	85	83	18	9	2	—	–	9	10½					
30	29	12	6	86	84	18	6	2	1	–	10	–½	0	1	–	–	2
31	30	12	3	87	85	18	3	2	2	–	10	2½	0	2	–	–	4
32	31	12	–	88	86	18	–	2	3	–	10	4¾	0	3	–	–	6¼
33	32	11	9	89	87	17	9	2	4	–	10	6¾	0	4	–	–	8¼
34	33	11	6	90	88	17	6	2	5	–	10	9	0	5	–	–	10½
35	34	11	3	91	89	17	3	2	6	–	10	11	0	6	–	1	–½
36	35	11	–	92	90	17	–	2	7	–	11	1¼	0	7	–	1	2¾
37	36	10	9	93	91	16	9	2	8	–	11	3¼	0	8	–	1	4¾
38	37	10	6	94	92	16	6	2	9	–	11	5½	0	9	–	1	7
39	38	10	3	95	93	16	3	2	10	–	11	7½	0	10	–	1	9
40	39	10	–	96	94	16	–	2	11	–	11	9¾	0	11	–	1	11
41	40	9	9	97	95	15	9	2	12	–	11	11¾	0	12	–	2	1¼
42	41	9	6	98	96	15	6	2	13	–	12	2	0	13	–	2	3½
43	42	9	3	99	97	15	3	2	14	–	12	4	0	14	–	2	5½
44	43	9	–	100	98	15	–	2	15	–	12	6	0	15	–	2	7½
45	44	8	9	200	197	10	–	2	16	–	12	8¼	0	16	–	2	9¾
46	45	8	6	300	296	5	–	2	17	–	12	10¼	0	17	–	2	11¾
47	46	8	3	400	395	–	–	2	18	–	13	–½	0	18	–	3	2
48	47	8	–	500	493	15	–	2	19	–	13	2½	0	19	–	3	4
49	48	7	9	600	592	10	–	2	20	–	13	4¾	0	20	–	3	6¼
50	49	7	6	700	691	5	–	2	21	–	13	6¾	0	21	–	3	8¼
51	50	7	3	800	790	–	–	2	22	–	13	9	0	22	–	3	10½
52	51	7	–	900	888	15	–	2	23	–	13	11	0	23	–	4	–½
53	52	6	9	1000	987	10	–	2	24	–	14	1¼	0	24	–	4	2¾
54	53	6	6	2000	1975	–	–	2	25	–	14	3¼	0	25	–	4	4¾
55	54	6	3	3000	2962	10	–	2	26	–	14	5½	0	26	–	4	7
56	55	6	–	4000	3950	–	–	2	27	–	14	7½	0	27	–	4	9

£20. per Ton. **20*s*. *per Cwt.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	–	–	57	57	–	–	1	–	–	5	–	3	–	–	15	–
2	2	–	–	58	58	–	–	1	1	–	5	2	3	1	–	15	2
3	3	–	–	59	59	–	–	1	2	–	5	4¼	3	2	–	15	4¼
4	4	–	–	60	60	–	–	1	3	–	5	6¼	3	3	–	15	6¼
5	5	–	–	61	61	–	–	1	4	–	5	8½	3	4	–	15	8½
6	6	–	–	62	62	–	–	1	5	–	5	10½	3	5	–	15	10½
7	7	–	–	63	63	–	–	1	6	–	6	–¾	3	6	–	16	–¾
8	8	–	–	64	64	–	–	1	7	–	6	3	3	7	–	16	3
9	9	–	–	65	65	–	–	1	8	–	6	5	3	8	–	16	5
10	10	–	–	66	66	–	–	1	9	–	6	7¼	3	9	–	16	7¼
11	11	–	–	67	67	–	–	1	10	–	6	9¼	3	10	–	16	9¼
12	12	–	–	68	68	–	–	1	11	–	6	11½	3	11	–	16	11½
13	13	–	–	69	69	–	–	1	12	–	7	1½	3	12	–	17	1½
14	14	–	–	70	70	–	–	1	13	–	7	3¾	3	13	–	17	3¾
15	15	–	–	71	71	–	–	1	14	–	7	6	3	14	–	17	6
16	16	–	–	72	72	–	–	1	15	–	7	8	3	15	–	17	8
17	17	–	–	73	73	–	–	1	16	–	7	10¼	3	16	–	17	10¼
18	18	–	–	74	74	–	–	1	17	–	8	–¼	3	17	–	18	–¼
19	19	–	–	75	75	–	–	1	18	–	8	2½	3	18	–	18	2½
20	20	–	–	76	76	–	–	1	19	–	8	4½	3	19	–	18	4½
21	21	–	–	77	77	–	–	1	20	–	8	6¾	3	20	–	18	6¾
22	22	–	–	78	78	–	–	1	21	–	8	9	3	21	–	18	9
23	23	–	–	79	79	–	–	1	22	–	8	11	3	22	–	18	11
24	24	–	–	80	80	–	–	1	23	–	9	1¼	3	23	–	19	1¼
25	25	–	–	81	81	–	–	1	24	–	9	3¼	3	24	–	19	3¼
26	26	–	–	82	82	–	–	1	25	–	9	5½	3	25	–	19	5½
27	27	–	–	83	83	–	–	1	26	–	9	7½	3	26	–	19	7½
28	28	–	–	84	84	–	–	1	27	–	9	9¾	3	27	–	19	9¾
29	29	–	–	85	85	–	–	2	—	–	10	–					
30	30	–	–	86	86	–	–	2	1	–	10	2	0	1	–	–	2
31	31	–	–	87	87	–	–	2	2	–	10	4¼	0	2	–	–	4¼
32	32	–	–	88	88	–	–	2	3	–	10	6¼	0	3	–	–	6¼
33	33	–	–	89	89	–	–	2	4	–	10	8½	0	4	–	–	8½
34	34	–	–	90	90	–	–	2	5	–	10	10½	0	5	–	–	10½
35	35	–	–	91	91	–	–	2	6	–	11	–¾	0	6	–	1	–¾
36	36	–	–	92	92	–	–	2	7	–	11	3	0	7	–	1	3
37	37	–	–	93	93	–	–	2	8	–	11	5	0	8	–	1	5
38	38	–	–	94	94	–	–	2	9	–	11	7¼	0	9	–	1	7¼
39	39	–	–	95	95	–	–	2	10	–	11	9¼	0	10	–	1	9¼
40	40	–	–	96	96	–	–	2	11	–	11	11½	0	11	–	1	11½
41	41	–	–	97	97	–	–	2	12	–	12	1½	0	12	–	2	1½
42	42	–	–	98	98	–	–	2	13	–	12	3¾	0	13	–	2	3¾
43	43	–	–	99	99	–	–	2	14	–	12	6	0	14	–	2	6
44	44	–	–	100	100	–	–	2	15	–	12	8	0	15	–	2	8
45	45	–	–	200	200	–	–	2	16	–	12	10¼	0	16	–	2	10¼
46	46	–	–	300	300	–	–	2	17	–	13	–¼	0	17	–	3	–¼
47	47	–	–	400	400	–	–	2	18	–	13	2½	0	18	–	3	2½
48	48	–	–	500	500	–	–	2	19	–	13	4½	0	19	–	3	4½
49	49	–	–	600	600	–	–	2	20	–	13	6¾	0	20	–	3	6¾
50	50	–	–	700	700	–	–	2	21	–	13	9	0	21	–	3	9
51	51	–	–	800	800	–	–	2	22	–	13	11	0	22	–	3	11
52	52	–	–	900	900	–	–	2	23	–	14	1¼	0	23	–	4	1¼
53	53	–	–	1000	1000	–	–	2	24	–	14	3¼	0	24	–	4	3¼
54	54	–	–	2000	2000	–	–	2	25	–	14	5½	0	25	–	4	5½
55	55	–	–	3000	3000	–	–	2	26	–	14	7½	0	26	–	4	7½
56	56	–	–	4000	4000	–	–	2	27	–	14	9¾	0	27	–	4	9¾

20*s*. 6*d*. *per Cwt*.

£20. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	–	6	57	58	8	6	1	–	–	5	1½	3	–	–	15	4½
2	2	1	–	58	59	9	–	1	1	–	5	3½	3	1	–	15	6½
3	3	1	6	59	60	9	6	1	2	–	5	5¾	3	2	–	15	8¾
4	4	2	–	60	61	10	–	1	3	–	5	8	3	3	–	15	11
5	5	2	6	61	62	10	6	1	4	–	5	10¼	3	4	–	16	1¼
6	6	3	–	62	63	11	–	1	5	–	6	–¼	3	5	–	16	3¼
7	7	3	6	63	64	11	6	1	6	–	6	2½	3	6	–	16	5½
8	8	4	–	64	65	12	–	1	7	–	6	4¾	3	7	–	16	7¾
9	9	4	6	65	66	12	6	1	8	–	6	7	3	8	–	16	10
10	10	5	–	66	67	13	–	1	9	–	6	9¼	3	9	–	17	–¼
11	11	5	6	67	68	13	6	1	10	–	6	11¼	3	10	–	17	2¼
12	12	6	–	68	69	14	–	1	11	–	7	1½	3	11	–	17	4½
13	13	6	6	69	70	14	6	1	12	–	7	3¾	3	12	–	17	6¾
14	14	7	–	70	71	15	–	1	13	–	7	6	3	13	–	17	9
15	15	7	6	71	72	15	6	1	14	–	7	8¼	3	14	–	17	11¼
16	16	8	–	72	73	16	–	1	15	–	7	10¼	3	15	–	18	1¼
17	17	8	6	73	74	16	6	1	16	–	8	–½	3	16	–	18	3½
18	18	9	–	74	75	17	–	1	17	–	8	2¾	3	17	–	18	5¾
19	19	9	6	75	76	17	6	1	18	–	8	5	3	18	–	18	8
20	20	10	–	76	77	18	–	1	19	–	8	7	3	19	–	18	10
21	21	10	6	77	78	18	6	1	20	–	8	9¼	3	20	–	19	–¼
22	22	11	–	78	79	19	–	1	21	–	8	11½	3	21	–	19	2½
23	23	11	6	79	80	19	6	1	22	–	9	1¾	3	22	–	19	4¾
24	24	12	–	80	82	–	–	1	23	–	9	4	3	23	–	19	7
25	25	12	6	81	83	–	6	1	24	–	9	6	3	24	–	19	9
26	26	13	–	82	84	1	–	1	25	–	9	8¼	3	25	–	19	11¼
27	27	13	6	83	85	1	6	1	26	–	9	10½	3	26	1	–	1½
28	28	14	–	84	86	2	–	1	27	–	10	–¾	3	27	1	–	3¾
29	29	14	6	85	87	2	6	2	—	–	10	3					
30	30	15	–	86	88	3	–	2	1	–	10	5	0	1	–	–	2
31	31	15	6	87	89	3	6	2	2	–	10	7¼	0	2	–	–	4¼
32	32	16	–	88	90	4	–	2	3	–	10	9½	0	3	–	–	6½
33	33	16	6	89	91	4	6	2	4	–	10	11¾	0	4	–	–	8¾
34	34	17	–	90	92	5	–	2	5	–	11	1¾	0	5	–	–	10¾
35	35	17	6	91	93	5	6	2	6	–	11	4	0	6	–	1	1
36	36	18	–	92	94	6	–	2	7	–	11	6¼	0	7	–	1	3¼
37	37	18	6	93	95	6	6	2	8	–	11	8½	0	8	–	1	5½
38	38	19	–	94	96	7	–	2	9	–	11	10¾	0	9	–	1	7¾
39	39	19	6	95	97	7	6	2	10	–	12	–¾	0	10	–	1	9¾
40	41	–	–	96	98	8	–	2	11	–	12	3	0	11	–	2	–
41	42	–	6	97	99	8	6	2	12	–	12	5¼	0	12	–	2	2¼
42	43	1	–	98	100	9	–	2	13	–	12	7½	0	13	–	2	4½
43	44	1	6	99	101	9	6	2	14	–	12	9¾	0	14	–	2	6¾
44	45	2	–	100	102	10	–	2	15	–	12	11¾	0	15	–	2	8¾
45	46	2	6	200	205	–	–	2	16	–	13	2	0	16	–	2	11
46	47	3	–	300	307	10	–	2	17	–	13	4¼	0	17	–	3	1¼
47	48	3	6	400	410	–	–	2	18	–	13	6½	0	18	–	3	3½
48	49	4	–	500	512	10	–	2	19	–	13	8½	0	19	–	3	5½
49	50	4	6	600	615	–	–	2	20	–	13	10¾	0	20	–	3	7¾
50	51	5	–	700	717	10	–	2	21	–	14	1	0	21	–	3	10
51	52	5	6	800	820	–	–	2	22	–	14	3¼	0	22	–	4	–¼
52	53	6	–	900	922	10	–	2	23	–	14	5½	0	23	–	4	2½
53	54	6	6	1000	1025	–	–	2	24	–	14	7½	0	24	–	4	4½
54	55	7	–	2000	2050	–	–	2	25	–	14	9¾	0	25	–	4	6¾
55	56	7	6	3000	3075	–	–	2	26	–	15	–	0	26	–	4	9
56	57	8	–	4000	4100	–	–	2	27	–	15	2¼	0	27	–	4	11¼

£21. per Ton. 2¼d. per lb. 21s. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	1	–	57	59	17	–	1	–	–	5	3	3	–	–	15	9
2	2	2	–	58	60	18	–	1	1	–	5	5¼	3	1	–	15	11¼
3	3	3	–	59	61	19	–	1	2	–	5	7½	3	2	–	16	1½
4	4	4	–	60	63	–	–	1	3	–	5	9¾	3	3	–	16	3¾
5	5	5	–	61	64	1	–	1	4	–	6	–	3	4	–	16	6
6	6	6	–	62	65	2	–	1	5	–	6	2¼	3	5	–	16	8¼
7	7	7	–	63	66	3	–	1	6	–	6	4½	3	6	–	16	10½
8	8	8	–	64	67	4	–	1	7	–	6	6¾	3	7	–	17	–¾
9	9	9	–	65	68	5	–	1	8	–	6	9	3	8	–	17	3
10	10	10	–	66	69	6	–	1	9	–	6	11¼	3	9	–	17	5¼
11	11	11	–	67	70	7	–	1	10	–	7	1½	3	10	–	17	7½
12	12	12	–	68	71	8	–	1	11	–	7	3¾	3	11	–	17	9¾
13	13	13	–	69	72	9	–	1	12	–	7	6	3	12	–	18	–
14	14	14	–	70	73	10	–	1	13	–	7	8¼	3	13	–	18	2¼
15	15	15	–	71	74	11	–	1	14	–	7	10½	3	14	–	18	4½
16	16	16	–	72	75	12	–	1	15	–	8	–¾	3	15	–	18	6¾
17	17	17	–	73	76	13	–	1	16	–	8	3	3	16	–	18	9
18	18	18	–	74	77	14	–	1	17	–	8	5¼	3	17	–	18	11¼
19	19	19	–	75	78	15	–	1	18	–	8	7½	3	18	–	19	1½
20	21	–	–	76	79	16	–	1	19	–	8	9¾	3	19	–	19	3¾
21	22	1	–	77	80	17	–	1	20	–	9	–	3	20	–	19	6
22	23	2	–	78	81	18	–	1	21	–	9	2¼	3	21	–	19	8¼
23	24	3	–	79	82	19	–	1	22	–	9	4½	3	22	–	19	10½
24	25	4	–	80	84	–	–	1	23	–	9	6¾	3	23	1	–	–¾
25	26	5	–	81	85	1	–	1	24	–	9	9	3	24	1	–	3
26	27	6	–	82	86	2	–	1	25	–	9	11¼	3	25	1	–	5¼
27	28	7	–	83	87	3	–	1	26	–	10	1½	3	26	1	–	7½
28	29	8	–	84	88	4	–	1	27	–	10	3¾	3	27	1	–	9¾
29	30	9	–	85	89	5	–	2	—	–	10	6					
30	31	10	–	86	90	6	–	2	1	–	10	8¼	0	1	–	–	2¼
31	32	11	–	87	91	7	–	2	2	–	10	10½	0	2	–	–	4½
32	33	12	–	88	92	8	–	2	3	–	11	–¾	0	3	–	–	6¾
33	34	13	–	89	93	9	–	2	4	–	11	3	0	4	–	–	9
34	35	14	–	90	94	10	–	2	5	–	11	5¼	0	5	–	–	11¼
35	36	15	–	91	95	11	–	2	6	–	11	7½	0	6	–	1	1½
36	37	16	–	92	96	12	–	2	7	–	11	9¾	0	7	–	1	3¾
37	38	17	–	93	97	13	–	2	8	–	12	–	0	8	–	1	6
38	39	18	–	94	98	14	–	2	9	–	12	2¼	0	9	–	1	8¼
39	40	19	–	95	99	15	–	2	10	–	12	4½	0	10	–	1	10½
40	42	–	–	96	100	16	–	2	11	–	12	6¾	0	11	–	2	–¾
41	43	1	–	97	101	17	–	2	12	–	12	9	0	12	–	2	3
42	44	2	–	98	102	18	–	2	13	–	12	11¼	0	13	–	2	5¼
43	45	3	–	99	103	19	–	2	14	–	13	1½	0	14	–	2	7½
44	46	4	–	100	105	–	–	2	15	–	13	3¾	0	15	–	2	9¾
45	47	5	–	200	210	–	–	2	16	–	13	6	0	16	–	3	–
46	48	6	–	300	315	–	–	2	17	–	13	8¼	0	17	–	3	2¼
47	49	7	–	400	420	–	–	2	18	–	13	10½	0	18	–	3	4½
48	50	8	–	500	525	–	–	2	19	–	14	–¾	0	19	–	3	6¾
49	51	9	–	600	630	–	–	2	20	–	14	3	0	20	–	3	9
50	52	10	–	700	735	–	–	2	21	–	14	5¼	0	21	–	3	11¼
51	53	11	–	800	840	–	–	2	22	–	14	7½	0	22	–	4	1½
52	54	12	–	900	945	–	–	2	23	–	14	9¾	0	23	–	4	3¾
53	55	13	–	1000	1050	–	–	2	24	–	15	–	0	24	–	4	6
54	56	14	–	2000	2100	–	–	2	25	–	15	2¼	0	25	–	4	8¼
55	57	15	–	3000	3150	–	–	2	26	–	15	4½	0	26	–	4	10½
56	58	16	–	4000	4200	–	–	2	27	–	15	6¾	0	27	–	5	–¾

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	1	6	57	61	5	6	1	-	-	5	4½	3	-	-	16	1½
2	2	3	-	58	62	7	-	1	1	-	5	6¾	3	1	-	16	3¾
3	3	4	6	59	63	8	6	1	2	-	5	9	3	2	-	16	6
4	4	6	-	60	64	10	-	1	3	-	5	11¼	3	3	-	16	8¼
5	5	7	6	61	65	11	6	1	4	-	6	1½	3	4	-	16	10½
6	6	9	-	62	66	13	-	1	5	-	6	4	3	5	-	17	1
7	7	10	6	63	67	14	6	1	6	-	6	6¼	3	6	-	17	3¼
8	8	12	-	64	68	16	-	1	7	-	6	8½	3	7	-	17	5½
9	9	13	6	65	69	17	6	1	8	-	6	10¾	3	8	-	17	7¾
10	10	15	-	66	70	19	-	1	9	-	7	1	3	9	-	17	10
11	11	16	6	67	72	-	6	1	10	-	7	3½	3	10	-	18	-½
12	12	18	-	68	73	2	-	1	11	-	7	5¾	3	11	-	18	2¾
13	13	19	6	69	74	3	6	1	12	-	7	8	3	12	-	18	5
14	15	1	-	70	75	5	-	1	13	-	7	10¼	3	13	-	18	7¼
15	16	2	6	71	76	6	6	1	14	-	8	-¾	3	14	-	18	9¾
16	17	4	-	72	77	8	-	1	15	-	8	3	3	15	-	19	-
17	18	5	6	73	78	9	6	1	16	-	8	5¼	3	16	-	19	2¼
18	19	7	-	74	79	11	-	1	17	-	8	7½	3	17	-	19	4½
19	20	8	6	75	80	12	6	1	18	-	8	9¾	3	18	-	19	6¾
20	21	10	-	76	81	14	-	1	19	-	9	-¼	3	19	-	19	9¼
21	22	11	6	77	82	15	6	1	20	-	9	2½	3	20	-	19	11½
22	23	13	-	78	83	17	-	1	21	-	9	4¾	3	21	1	-	1¾
23	24	14	6	79	84	18	6	1	22	-	9	7	3	22	1	-	4
24	25	16	-	80	86	-	-	1	23	-	9	9¼	3	23	1	-	6¼
25	26	17	6	81	87	1	6	1	24	-	9	11¾	3	24	1	-	8¾
26	27	19	-	82	88	3	-	1	25	-	10	2	3	25	1	-	11
27	29	-	6	83	89	4	6	1	26	-	10	4¼	3	26	1	1	1¼
28	30	2	-	84	90	6	-	1	27	-	10	6½	3	27	1	1	3½
29	31	3	6	85	91	7	6	2	—	-	10	9					
30	32	5	-	86	92	9	-	2	1	-	10	11¼	0	1	-	-	2¼
31	33	6	6	87	93	10	6	2	2	-	11	1½	0	2	-	-	4½
32	34	8	-	88	94	12	-	2	3	-	11	3¾	0	3	-	-	6¾
33	35	9	6	89	95	13	6	2	4	-	11	6	0	4	-	-	9
34	36	11	-	90	96	15	-	2	5	-	11	8½	0	5	-	-	11½
35	37	12	6	91	97	16	6	2	6	-	11	10¾	0	6	-	1	1¾
36	38	14	-	92	98	18	-	2	7	-	12	1	0	7	-	1	4
37	39	15	6	93	99	19	6	2	8	-	12	3¼	0	8	-	1	6¼
38	40	17	-	94	101	1	-	2	9	-	12	5½	0	9	-	1	8½
39	41	18	6	95	102	2	6	2	10	-	12	8	0	10	-	1	11
40	43	-	-	96	103	4	-	2	11	-	12	10¼	0	11	-	2	1¼
41	44	1	6	97	104	5	6	2	12	-	13	-½	0	12	-	2	3½
42	45	3	-	98	105	7	-	2	13	-	13	2¾	0	13	-	2	5¾
43	46	4	6	99	106	8	6	2	14	-	13	5¼	0	14	-	2	8¼
44	47	6	-	100	107	10	-	2	15	-	13	7½	0	15	-	2	10½
45	48	7	6	200	215	-	-	2	16	-	13	9¾	0	16	-	3	-¾
46	49	9	-	300	322	10	-	2	17	-	14	-	0	17	-	3	3
47	50	10	6	400	430	-	-	2	18	-	14	2¼	0	18	-	3	5¼
48	51	12	-	500	537	10	-	2	19	-	14	4¾	0	19	-	3	7¾
49	52	13	6	600	645	-	-	2	20	-	14	7	0	20	-	3	10
50	53	15	-	700	752	10	-	2	21	-	14	9¼	0	21	-	4	-¼
51	54	16	6	800	860	-	-	2	22	-	14	11½	0	22	-	4	2½
52	55	18	-	900	967	10	-	2	23	-	15	1¾	0	23	-	4	4¾
53	56	19	6	1000	1075	-	-	2	24	-	15	4¼	0	24	-	4	7¼
54	58	1	-	2000	2150	-	-	2	25	-	15	6½	0	25	-	4	9½
55	59	2	6	3000	3225	-	-	2	26	-	15	8¾	0	26	-	4	11¾
56	60	4	-	4000	4300	-	-	2	27	-	15	11	0	27	-	5	2

£22. per Ton.

22s. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	2	–	57	62	14	–	1	–	–	5	6	3	–	–	16	6
2	2	4	–	58	63	16	–	1	1	–	5	8¼	3	1	–	16	8¼
3	3	6	–	59	64	18	–	1	2	–	5	10½	3	2	–	16	10½
4	4	8	–	60	66	–	–	1	3	–	6	1	3	3	–	17	1
5	5	10	–	61	67	2	–	1	4	–	6	3¼	3	4	–	17	3¼
6	6	12	–	62	68	4	–	1	5	–	6	5¾	3	5	–	17	5¾
7	7	14	–	63	69	6	–	1	6	–	6	8	3	6	–	17	8
8	8	16	–	64	70	8	–	1	7	–	6	10½	3	7	–	17	10½
9	9	18	–	65	71	10	–	1	8	–	7	–¾	3	8	–	18	–¾
10	11	–	–	66	72	12	–	1	9	–	7	3	3	9	–	18	3
11	12	2	–	67	73	14	–	1	10	–	7	5½	3	10	–	18	5½
12	13	4	–	68	74	16	–	1	11	–	7	7¾	3	11	–	18	7¾
13	14	6	–	69	75	18	–	1	12	–	7	10¼	3	12	–	18	10¼
14	15	8	–	70	77	–	–	1	13	–	8	–½	3	13	–	19	–½
15	16	10	–	71	78	2	–	1	14	–	8	3	3	14	–	19	3
16	17	12	–	72	79	4	–	1	15	–	8	5¼	3	15	–	19	5¼
17	18	14	–	73	80	6	–	1	16	–	8	7½	3	16	–	19	7½
18	19	16	–	74	81	8	–	1	17	–	8	10	3	17	–	19	10
19	20	18	–	75	82	10	–	1	18	–	9	–¼	3	18	1	–	–¼
20	22	–	–	76	83	12	–	1	19	–	9	2¾	3	19	1	–	2¾
21	23	2	–	77	84	14	–	1	20	–	9	5	3	20	1	–	5
22	24	4	–	78	85	16	–	1	21	–	9	7½	3	21	1	–	7½
23	25	6	–	79	86	18	–	1	22	–	9	9¾	3	22	1	–	9¾
24	26	8	–	80	88	–	–	1	23	–	10	–	3	23	1	1	–
25	27	10	–	81	89	2	–	1	24	–	10	2½	3	24	1	1	2½
26	28	12	–	82	90	4	–	1	25	–	10	4¾	3	25	1	1	4¾
27	29	14	–	83	91	6	–	1	26	–	10	7¼	3	26	1	1	7¼
28	30	16	–	84	92	8	–	1	27	–	10	9½	3	27	1	1	9½
29	31	18	–	85	93	10	–	2	—	–	11	–	—	—	—	—	—
30	33	–	–	86	94	12	–	2	1	–	11	2¼	0	1	–	–	2¼
31	34	2	–	87	95	14	–	2	2	–	11	4½	0	2	–	–	4½
32	35	4	–	88	96	16	–	2	3	–	11	7	0	3	–	–	7
33	36	6	–	89	97	18	–	2	4	–	11	9¼	0	4	–	–	9¼
34	37	8	–	90	99	–	–	2	5	–	11	11¾	0	5	–	–	11¾
35	38	10	–	91	100	2	–	2	6	–	12	2	0	6	–	1	2
36	39	12	–	92	101	4	–	2	7	–	12	4½	0	7	–	1	4½
37	40	14	–	93	102	6	–	2	8	–	12	6¾	0	8	–	1	6¾
38	41	16	–	94	103	8	–	2	9	–	12	9	0	9	–	1	9
39	42	18	–	95	104	10	–	2	10	–	12	11½	0	10	–	1	11½
40	44	–	–	96	105	12	–	2	11	–	13	1¾	0	11	–	2	1¾
41	45	2	–	97	106	14	–	2	12	–	13	4¼	0	12	–	2	4¼
42	46	4	–	98	107	16	–	2	13	–	13	6½	0	13	–	2	6½
43	47	6	–	99	108	18	–	2	14	–	13	9	0	14	–	2	9
44	48	8	–	100	110	–	–	2	15	–	13	11¼	0	15	–	2	11¼
45	49	10	–	200	220	–	–	2	16	–	14	1½	0	16	–	3	1½
46	50	12	–	300	330	–	–	2	17	–	14	4	0	17	–	3	4
47	51	14	–	400	440	–	–	2	18	–	14	6¼	0	18	–	3	6¼
48	52	16	–	500	550	–	–	2	19	–	14	8¾	0	19	–	3	8¾
49	53	18	–	600	660	–	–	2	20	–	14	11	0	20	–	3	11
50	55	–	–	700	770	–	–	2	21	–	15	1½	0	21	–	4	1½
51	56	2	–	800	880	–	–	2	22	–	15	3¾	0	22	–	4	3¾
52	57	4	–	900	990	–	–	2	23	–	15	6	0	23	–	4	6
53	58	6	–	1000	1100	–	–	2	24	–	15	8½	0	24	–	4	8½
54	59	8	–	2000	2200	–	–	2	25	–	15	10¾	0	25	–	4	10¾
55	60	10	–	3000	3300	–	–	2	26	–	16	1¼	0	26	–	5	1¼
56	61	12	–	4000	4400	–	–	2	27	–	16	3½	0	27	–	5	3½

22*s*. 6*d*. *per Cwt*. £22. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	2	6	57	64	2	6	1	–	–	5	7½	3	–	–	16	10½
2	2	5	–	58	65	5	–	1	1	–	5	9¾	3	1	–	17	–¾
3	3	7	6	59	66	7	6	1	2	–	6	–¼	3	2	–	17	3¼
4	4	10	–	60	67	10	–	1	3	–	6	2½	3	3	–	17	5½
5	5	12	6	61	68	12	6	1	4	–	6	5	3	4	–	17	8
6	6	15	–	62	69	15	–	1	5	–	6	7½	3	5	–	17	10½
7	7	17	6	63	70	17	6	1	6	–	6	9¾	3	6	–	18	–¾
8	9	–	–	64	72	–	–	1	7	–	7	–¼	3	7	–	18	3¼
9	10	2	6	65	73	2	6	1	8	–	7	2¾	3	8	–	18	5¾
10	11	5	–	66	74	5	–	1	9	–	7	5	3	9	–	18	8
11	12	7	6	67	75	7	6	1	10	–	7	7½	3	10	–	18	10½
12	13	10	–	68	76	10	–	1	11	–	7	10	3	11	–	19	1
13	14	12	6	69	77	12	6	1	12	–	8	–¼	3	12	–	19	3¼
14	15	15	–	70	78	15	–	1	13	–	8	2¾	3	13	–	19	5¾
15	16	17	6	71	79	17	6	1	14	–	8	5¼	3	14	–	19	8¼
16	18	–	–	72	81	–	–	1	15	–	8	7½	3	15	–	19	10½
17	19	2	6	73	82	2	6	1	16	–	8	10	3	16	1	–	1
18	20	5	–	74	83	5	–	1	17	–	9	–¼	3	17	1	–	3¼
19	21	7	6	75	84	7	6	1	18	–	9	2¾	3	18	1	–	5¾
20	22	10	–	76	85	10	–	1	19	–	9	5¼	3	19	1	–	8¼
21	23	12	6	77	86	12	6	1	20	–	9	7½	3	20	1	–	10½
22	24	15	–	78	87	15	–	1	21	–	9	10	3	21	1	1	1
23	25	17	6	79	88	17	6	1	22	–	10	–½	3	22	1	1	3½
24	27	–	–	80	90	–	–	1	23	–	10	2¾	3	23	1	1	5¾
25	28	2	6	81	91	2	6	1	24	–	10	5¼	3	24	1	1	8¼
26	29	5	–	82	92	5	–	1	25	–	10	7¾	3	25	1	1	10¾
27	30	7	6	83	93	7	6	1	26	–	10	10	3	26	1	2	1
28	31	10	–	84	94	10	–	1	27	–	11	–½	3	27	1	2	3½
29	32	12	6	85	95	12	6	2	—	–	11	3					
30	33	15	–	86	96	15	–	2	1	–	11	5¼	0	1	–	–	2¼
31	34	17	6	87	97	17	6	2	2	–	11	7¾	0	2	–	–	4¾
32	36	–	–	88	99	–	–	2	3	–	11	10	0	3	–	–	7
33	37	2	6	89	100	2	6	2	4	–	12	–½	0	4	–	–	9½
34	38	5	–	90	101	5	–	2	5	–	12	3	0	5	–	1	–
35	39	7	6	91	102	7	6	2	6	–	12	5¼	0	6	–	1	2¼
36	40	10	–	92	103	10	–	2	7	–	12	7¾	0	7	–	1	4¾
37	41	12	6	93	104	12	6	2	8	–	12	10¼	0	8	–	1	7¼
38	42	15	–	94	105	15	–	2	9	–	13	–½	0	9	–	1	9½
39	43	17	6	95	106	17	6	2	10	–	13	3	0	10	–	2	–
40	45	–	–	96	108	–	–	2	11	–	13	5½	0	11	–	2	2½
41	46	2	6	97	109	2	6	2	12	–	13	7¾	0	12	–	2	4¾
42	47	5	–	98	110	5	–	2	13	–	13	10¼	0	13	–	2	7¼
43	48	7	6	99	111	7	6	2	14	–	14	–¾	0	14	–	2	9¾
44	49	10	–	100	112	10	–	2	15	–	14	3	0	15	–	3	–
45	50	12	6	200	225	–	–	2	16	–	14	5½	0	16	–	3	2½
46	51	15	–	300	337	10	–	2	17	–	14	7¾	0	17	–	3	4¾
47	52	17	6	400	450	–	–	2	18	–	14	10¼	0	18	–	3	7¼
48	54	–	–	500	562	10	–	2	19	–	15	–¾	0	19	–	3	9¾
49	55	2	6	600	675	–	–	2	20	–	15	3	0	20	–	4	–
50	56	5	–	700	787	10	–	2	21	–	15	5½	0	21	–	4	2½
51	57	7	6	800	900	–	–	2	22	–	15	8	0	22	–	4	5
52	58	10	–	900	1012	10	–	2	23	–	15	10¼	0	23	–	4	7¼
53	59	12	6	1000	1125	–	–	2	24	–	16	–¾	0	24	–	4	9¾
54	60	15	–	2000	2250	–	–	2	25	–	16	3¼	0	25	–	5	–¼
55	61	17	6	3000	3375	–	–	2	26	–	16	5½	0	26	–	5	2½
56	63	–	–	4000	4500	–	–	2	27	–	16	8	0	27	–	5	5

£23. per Ton.

23s. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	3	–	57	65	11	–	1	–	–	5	9	3	–	–	17	3
2	2	6	–	58	66	14	–	1	1	–	5	11¼	3	1	–	17	5¼
3	3	9	–	59	67	17	–	1	2	–	6	1¾	3	2	–	17	7¾
4	4	12	–	60	69	–	–	1	3	–	6	4¼	3	3	–	17	10¼
5	5	15	–	61	70	3	–	1	4	–	6	6¾	3	4	–	18	–¾
6	6	18	–	62	71	6	–	1	5	–	6	9¼	3	5	–	18	3¼
7	8	1	–	63	72	9	–	1	6	–	6	11¾	3	6	–	18	5¾
8	9	4	–	64	73	12	–	1	7	–	7	2¼	3	7	–	18	8¼
9	10	7	–	65	74	15	–	1	8	–	7	4½	3	8	–	18	10½
10	11	10	–	66	75	18	–	1	9	–	7	7	3	9	–	19	1
11	12	13	–	67	77	1	–	1	10	–	7	9½	3	10	–	19	3½
12	13	16	–	68	78	4	–	1	11	–	8	–	3	11	–	19	6
13	14	19	–	69	79	7	–	1	12	–	8	2½	3	12	–	19	8½
14	16	2	–	70	80	10	–	1	13	–	8	5	3	13	–	19	11
15	17	5	–	71	81	13	–	1	14	–	8	7½	3	14	1	–	1½
16	18	8	–	72	82	16	–	1	15	–	8	9¾	3	15	1	–	3¾
17	19	11	–	73	83	19	–	1	16	–	9	–¼	3	16	1	–	6¼
18	20	14	–	74	85	2	–	1	17	–	9	2¾	3	17	1	–	8¾
19	21	17	–	75	86	5	–	1	18	–	9	5¼	3	18	1	–	11¼
20	23	–	–	76	87	8	–	1	19	–	9	7¾	3	19	1	1	1¾
21	24	3	–	77	88	11	–	1	20	–	9	10¼	3	20	1	1	4¼
22	25	6	–	78	89	14	–	1	21	–	10	–¾	3	21	1	1	6¾
23	26	9	–	79	90	17	–	1	22	–	10	3	3	22	1	1	9
24	27	12	–	80	92	–	–	1	23	–	10	5½	3	23	1	1	11½
25	28	15	–	81	93	3	–	1	24	–	10	8	3	24	1	2	2
26	29	18	–	82	94	6	–	1	25	–	10	10½	3	25	1	2	4½
27	31	1	–	83	95	9	–	1	26	–	11	1	3	26	1	2	7
28	32	4	–	84	96	12	–	1	27	–	11	3½	3	27	1	2	9½
29	33	7	–	85	97	15	–	2	—	–	11	6					
30	34	10	–	86	98	18	–	2	1	–	11	8½	0	1	–	–	2¼
31	35	13	–	87	100	1	–	2	2	–	11	10¾	0	2	–	–	4¾
32	36	16	–	88	101	4	–	2	3	–	12	1¼	0	3	–	–	7¼
33	37	19	–	89	102	7	–	2	4	–	12	3¾	0	4	–	–	9¾
34	39	2	–	90	103	10	–	2	5	–	12	6¼	0	5	–	1	–¼
35	40	5	–	91	104	13	–	2	6	–	12	8¾	0	6	–	1	2¾
36	41	8	–	92	105	16	–	2	7	–	12	11¼	0	7	–	1	5¼
37	42	11	–	93	106	19	–	2	8	–	13	1½	0	8	–	1	7½
38	43	14	–	94	108	2	–	2	9	–	13	4	0	9	–	1	10
39	44	17	–	95	109	5	–	2	10	–	13	6½	0	10	–	2	–½
40	46	–	–	96	110	8	–	2	11	–	13	9	0	11	–	2	3
41	47	3	–	97	111	11	–	2	12	–	13	11½	0	12	–	2	5½
42	48	6	–	98	112	14	–	2	13	–	14	2	0	13	–	2	8
43	49	9	–	99	113	17	–	2	14	–	14	4½	0	14	–	2	10½
44	50	12	–	100	115	–	–	2	15	–	14	6¾	0	15	–	3	1¾
45	51	15	–	200	230	–	–	2	16	–	14	9¼	0	16	–	3	3¼
46	52	18	–	300	345	–	–	2	17	–	14	11¾	0	17	–	3	5¾
47	54	1	–	400	460	–	–	2	18	–	15	2¼	0	18	–	3	8¼
48	55	4	–	500	575	–	–	2	19	–	15	4¾	0	19	–	3	10¾
49	56	7	–	600	690	–	–	2	20	–	15	7¼	0	20	–	4	1¼
50	57	10	–	700	805	–	–	2	21	–	15	9¾	0	21	–	4	3¾
51	58	13	–	800	920	–	–	2	22	–	16	–	0	22	–	4	6
52	59	16	–	900	1035	–	–	2	23	–	16	2½	0	23	–	4	8½
53	60	19	–	1000	1150	–	–	2	24	–	16	5	0	24	–	4	11
54	62	2	–	2000	2300	–	–	2	25	–	16	7½	0	25	–	5	1½
55	63	5	–	3000	3450	–	–	2	26	–	16	10	0	26	–	5	4
56	64	8	–	4000	4600	–	–	2	27	–	17	–½	0	27	–	5	6½

23*s*. 4*d*. *per Cwt*. 2½*d*. *per lb*. £23. 6*s*. 8*d*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	3	4	57	66	10	–	1	–	–	5	10	3	–	–	17	6
2	2	6	8	58	67	13	4	1	1	–	6	–½	3	1	–	17	8½
3	3	10	–	59	68	16	8	1	2	–	6	3	3	2	–	17	11
4	4	13	4	60	70	–	–	1	3	–	6	5½	3	3	–	18	1½
5	5	16	8	61	71	3	4	1	4	–	6	8	3	4	–	18	4
6	7	–	–	62	72	6	8	1	5	–	6	10½	3	5	–	18	6½
7	8	3	4	63	73	10	–	1	6	–	7	1	3	6	–	18	9
8	9	6	8	64	74	13	4	1	7	–	7	3½	3	7	–	18	11½
9	10	10	–	65	75	16	8	1	8	–	7	6	3	8	–	19	2
10	11	13	4	66	77	–	–	1	9	–	7	8½	3	9	–	19	4½
11	12	16	8	67	78	3	4	1	10	–	7	11	3	10	–	19	7
12	14	–	–	68	79	6	8	1	11	–	8	1½	3	11	–	19	9½
13	15	3	4	69	80	10	–	1	12	–	8	4	3	12	1	–	–
14	16	6	8	70	81	13	4	1	13	–	8	6½	3	13	1	–	2½
15	17	10	–	71	82	16	8	1	14	–	8	9	3	14	1	–	5
16	18	13	4	72	84	–	–	1	15	–	8	11½	3	15	1	–	7½
17	19	16	8	73	85	3	4	1	16	–	9	2	3	16	1	–	10
18	21	–	–	74	86	6	8	1	17	–	9	4½	3	17	1	1	–½
19	22	3	4	75	87	10	–	1	18	–	9	7	3	18	1	1	3
20	23	6	8	76	88	13	4	1	19	–	9	9½	3	19	1	1	5½
21	24	10	–	77	89	16	8	1	20	–	10	–	3	20	1	1	8
22	25	13	4	78	91	–	–	1	21	–	10	2½	3	21	1	1	10½
23	26	16	8	79	92	3	4	1	22	–	10	5	3	22	1	2	1
24	28	–	–	80	93	6	8	1	23	–	10	7½	3	23	1	2	3½
25	29	3	4	81	94	10	–	1	24	–	10	10	3	24	1	2	6
26	30	6	8	82	95	13	4	1	25	–	11	–½	3	25	1	2	8½
27	31	10	–	83	96	16	8	1	26	–	11	3	3	26	1	2	11
28	32	13	4	84	98	–	–	1	27	–	11	5½	3	27	1	3	1½
29	33	16	8	85	99	3	4	2	—	–	11	8					
30	35	–	–	86	100	6	8	2	1	–	11	10½	0	1	–	–	2½
31	36	3	4	87	101	10	–	2	2	–	12	1	0	2	–	–	5
32	37	6	8	88	102	13	4	2	3	–	12	3½	0	3	–	–	7½
33	38	10	–	89	103	16	8	2	4	–	12	6	0	4	–	–	10
34	39	13	4	90	105	–	–	2	5	–	12	8½	0	5	–	1	–½
35	40	16	8	91	106	3	4	2	6	–	12	11	0	6	–	1	3
36	42	–	–	92	107	6	8	2	7	–	13	1½	0	7	–	1	5½
37	43	3	4	93	108	10	–	2	8	–	13	4	0	8	–	1	8
38	44	6	8	94	109	13	4	2	9	–	13	6½	0	9	–	1	10½
39	45	10	–	95	110	16	8	2	10	–	13	9	0	10	–	2	1
40	46	13	4	96	112	–	–	2	11	–	13	11½	0	11	–	2	3½
41	47	16	8	97	113	3	4	2	12	–	14	2	0	12	–	2	6
42	49	–	–	98	114	6	8	2	13	–	14	4½	0	13	–	2	8½
43	50	3	4	99	115	10	–	2	14	–	14	7	0	14	–	2	11
44	51	6	8	100	116	13	4	2	15	–	14	9½	0	15	–	3	1½
45	52	10	–	200	233	6	8	2	16	–	15	–	0	16	–	3	4
46	53	13	4	300	350	–	–	2	17	–	15	2½	0	17	–	3	6½
47	54	16	8	400	466	13	4	2	18	–	15	5	0	18	–	3	9
48	56	–	–	500	583	6	8	2	19	–	15	7½	0	19	–	3	11½
49	57	3	4	600	700	–	–	2	20	–	15	10	0	20	–	4	2
50	58	6	8	700	816	13	4	2	21	–	16	–½	0	21	–	4	4½
51	59	10	–	800	933	6	8	2	22	–	16	3	0	22	–	4	7
52	60	13	4	900	1050	–	–	2	23	–	16	5½	0	23	–	4	9½
53	61	16	8	1000	1166	13	4	2	24	–	16	8	0	24	–	5	–
54	63	–	–	2000	2333	6	8	2	25	–	16	10½	0	25	–	5	2½
55	64	3	4	3000	3500	–	–	2	26	–	17	1	0	26	–	5	5
56	65	6	8	4000	4666	13	4	2	27	–	17	3½	0	27	–	5	7½

£23. 10s. per Ton.

23s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.
1	1	3	6	57	66	19	6
2	2	7	–	58	68	3	–
3	3	10	6	59	69	6	6
4	4	14	–	60	70	10	–
5	5	17	6	61	71	13	6
6	7	1	–	62	72	17	–
7	8	4	6	63	74	–	6
8	9	8	–	64	75	4	–
9	10	11	6	65	76	7	6
10	11	15	–	66	77	11	–
11	12	18	6	67	78	14	6
12	14	2	–	68	79	18	–
13	15	5	6	69	81	1	6
14	16	9	–	70	82	5	–
15	17	12	6	71	83	8	6
16	18	16	–	72	84	12	–
17	19	19	6	73	85	15	6
18	21	3	–	74	86	19	–
19	22	6	6	75	88	2	6
20	23	10	–	76	89	6	–
21	24	13	6	77	90	9	6
22	25	17	–	78	91	13	–
23	27	–	6	79	92	16	6
24	28	4	–	80	94	–	–
25	29	7	6	81	95	3	6
26	30	11	–	82	96	7	–
27	31	14	6	83	97	10	6
28	32	18	–	84	98	14	–
29	34	1	6	85	99	17	6
30	35	5	–	86	101	1	–
31	36	8	6	87	102	4	6
32	37	12	–	88	103	8	–
33	38	15	6	89	104	11	6
34	39	19	–	90	105	15	–
35	41	2	6	91	106	18	6
36	42	6	–	92	108	2	–
37	43	9	6	93	109	5	6
38	44	13	–	94	110	9	–
39	45	16	6	95	111	12	6
40	47	–	–	96	112	16	–
41	48	3	6	97	113	19	6
42	49	7	–	98	115	3	–
43	50	10	6	99	116	6	6
44	51	14	–	100	117	10	–
45	52	17	6	200	235	–	–
46	54	1	–	300	352	10	–
47	55	4	6	400	470	–	–
48	56	8	–	500	587	10	–
49	57	11	6	600	705	–	–
50	58	15	–	700	822	10	–
51	59	18	6	800	940	–	–
52	61	2	–	900	1057	10	–
53	62	5	6	1000	1175	–	–
54	63	9	–	2000	2350	–	–
55	64	12	6	3000	3525	–	–
56	65	16	–	4000	4700	–	–

qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	–	5	10½	3	–	–	17	7½
1	1	–	6	1	3	1	–	17	10
1	2	–	6	3½	3	2	–	18	–½
1	3	–	6	6	3	3	–	18	3
1	4	–	6	8½	3	4	–	18	5½
1	5	–	6	11	3	5	–	18	8
1	6	–	7	1½	3	6	–	18	10½
1	7	–	7	4	3	7	–	19	1
1	8	–	7	6½	3	8	–	19	3½
1	9	–	7	9	3	9	–	19	6
1	10	–	7	11½	3	10	–	19	8½
1	11	–	8	2	3	11	–	19	11
1	12	–	8	4½	3	12	1	–	1½
1	13	–	8	7	3	13	1	–	4
1	14	–	8	9¾	3	14	1	–	6¾
1	15	–	9	–¼	3	15	1	–	9¼
1	16	–	9	2¾	3	16	1	–	11¾
1	17	–	9	5¼	3	17	1	1	2¼
1	18	–	9	7¾	3	18	1	1	4¾
1	19	–	9	10¼	3	19	1	1	7¼
1	20	–	10	–¾	3	20	1	1	9¾
1	21	–	10	3¼	3	21	1	2	–¼
1	22	–	10	5¾	3	22	1	2	2¾
1	23	–	10	8¼	3	23	1	2	5¼
1	24	–	10	10¾	3	24	1	2	7¾
1	25	–	11	1¼	3	25	1	2	10¼
1	26	–	11	3¾	3	26	1	3	–¾
1	27	–	11	6¼	3	27	1	3	3¼
2	—	–	11	9					
2	1	–	11	11½	0	1	–	–	2½
2	2	–	12	2	0	2	–	–	5
2	3	–	12	4½	0	3	–	–	7½
2	4	–	12	7	0	4	–	–	10
2	5	–	12	9½	0	5	–	1	–½
2	6	–	13	–	0	6	–	1	3
2	7	–	13	2½	0	7	–	1	5½
2	8	–	13	5	0	8	–	1	8
2	9	–	13	7½	0	9	–	1	10½
2	10	–	13	10	0	10	–	2	1
2	11	–	14	–½	0	11	–	2	3½
2	12	–	14	3	0	12	–	2	6
2	13	–	14	5½	0	13	–	2	8½
2	14	–	14	8¼	0	14	–	2	11¼
2	15	–	14	10¾	0	15	–	3	1¾
2	16	–	15	1¼	0	16	–	3	4¼
2	17	–	15	3¾	0	17	–	3	6¾
2	18	–	15	6¼	0	18	–	3	9¼
2	19	–	15	8¾	0	19	–	3	11¾
2	20	–	15	11¼	0	20	–	4	2¼
2	21	–	16	1¾	0	21	–	4	4¾
2	22	–	16	4¼	0	22	–	4	7¼
2	23	–	16	6¾	0	23	–	4	9¾
2	24	–	16	9¼	0	24	–	5	–¼
2	25	–	16	11¾	0	25	–	5	2¾
2	26	–	17	2¼	0	26	–	5	5¼
2	27	–	17	4¾	0	27	–	5	7¾

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	4	–	57	68	8	–	1	–	–	6	–	3	–	–	18	–
2	2	8	–	58	69	12	–	1	1	–	6	2½	3	1	–	18	2½
3	3	12	–	59	70	16	–	1	2	–	6	5	3	2	–	18	5
4	4	16	–	60	72	–	–	1	3	–	6	7½	3	3	–	18	7½
5	6	–	–	61	73	4	–	1	4	–	6	10¼	3	4	–	18	10¼
6	7	4	–	62	74	8	–	1	5	–	7	–¾	3	5	–	19	–¾
7	8	8	–	63	75	12	–	1	6	–	7	3¼	3	6	–	19	3¼
8	9	12	–	64	76	16	–	1	7	–	7	6	3	7	–	19	6
9	10	16	–	65	78	–	–	1	8	–	7	8½	3	8	–	19	8½
10	12	–	–	66	79	4	–	1	9	–	7	11	3	9	–	19	11
11	13	4	–	67	80	8	–	1	10	–	8	1½	3	10	1	–	1½
12	14	8	–	68	81	12	–	1	11	–	8	4¼	3	11	1	–	4¼
13	15	12	–	69	82	16	–	1	12	–	8	6¾	3	12	1	–	6¾
14	16	16	–	70	84	–	–	1	13	–	8	9¼	3	13	1	–	9¼
15	18	–	–	71	85	4	–	1	14	–	9	–	3	14	1	1	–
16	19	4	–	72	86	8	–	1	15	–	9	2½	3	15	1	1	2½
17	20	8	–	73	87	12	–	1	16	–	9	5	3	16	1	1	5
18	21	12	–	74	88	16	–	1	17	–	9	7½	3	17	1	1	7½
19	22	16	–	75	90	–	–	1	18	–	9	10¼	3	18	1	1	10¼
20	24	–	–	76	91	4	–	1	19	–	10	–¾	3	19	1	2	–¾
21	25	4	–	77	92	8	–	1	20	–	10	3¼	3	20	1	2	3¼
22	26	8	–	78	93	12	–	1	21	–	10	6	3	21	1	2	6
23	27	12	–	79	94	16	–	1	22	–	10	8½	3	22	1	2	8½
24	28	16	–	80	96	–	–	1	23	–	10	11	3	23	1	2	11
25	30	–	–	81	97	4	–	1	24	–	11	1½	3	24	1	3	1½
26	31	4	–	82	98	8	–	1	25	–	11	4¼	3	25	1	3	4¼
27	32	8	–	83	99	12	–	1	26	–	11	6¾	3	26	1	3	6¾
28	33	12	–	84	100	16	–	1	27	–	11	9¼	3	27	1	3	9¼
29	34	16	–	85	102	–	–	2	—	–	12	–	—	—	—	—	—
30	36	–	–	86	103	4	–	2	1	–	12	2½	0	1	–	–	2½
31	37	4	–	87	104	8	–	2	2	–	12	5	0	2	–	–	5
32	38	8	–	88	105	12	–	2	3	–	12	7½	0	3	–	–	7½
33	39	12	–	89	106	16	–	2	4	–	12	10¼	0	4	–	–	10¼
34	40	16	–	90	108	–	–	2	5	–	13	–¾	0	5	–	1	–¾
35	42	–	–	91	109	4	–	2	6	–	13	3¼	0	6	–	1	3¼
36	43	4	–	92	110	8	–	2	7	–	13	6	0	7	–	1	6
37	44	8	–	93	111	12	–	2	8	–	13	8½	0	8	–	1	8½
38	45	12	–	94	112	16	–	2	9	–	13	11	0	9	–	1	11
39	46	16	–	95	114	–	–	2	10	–	14	1½	0	10	–	2	1½
40	48	–	–	96	115	4	–	2	11	–	14	4¼	0	11	–	2	4¼
41	49	4	–	97	116	8	–	2	12	–	14	6¾	0	12	–	2	6¾
42	50	8	–	98	117	12	–	2	13	–	14	9¼	0	13	–	2	9¼
43	51	12	–	99	118	16	–	2	14	–	15	–	0	14	–	3	–
44	52	16	–	100	120	–	–	2	15	–	15	2½	0	15	–	3	2½
45	54	–	–	200	240	–	–	2	16	–	15	5	0	16	–	3	5
46	55	4	–	300	360	–	–	2	17	–	15	7½	0	17	–	3	7½
47	56	8	–	400	480	–	–	2	18	–	15	10¼	0	18	–	3	10¼
48	57	12	–	500	600	–	–	2	19	–	16	–¾	0	19	–	4	–¾
49	58	16	–	600	720	–	–	2	20	–	16	3¼	0	20	–	4	3¼
50	60	–	–	700	840	–	–	2	21	–	16	6	0	21	–	4	6
51	61	4	–	800	960	–	–	2	22	–	16	8½	0	22	–	4	8½
52	62	8	–	900	1080	–	–	2	23	–	16	11	0	23	–	4	11
53	63	12	–	1000	1200	–	–	2	24	–	17	1½	0	24	–	5	1½
54	64	16	–	2000	2400	–	–	2	25	–	17	4¼	0	25	–	5	4¼
55	66	–	–	3000	3600	–	–	2	26	–	17	6¾	0	26	–	5	6¾
56	67	4	–	4000	4800	–	–	2	27	–	17	9¼	0	27	–	5	9¼

£24. 10s. per Ton. **24s. 6d. per Cwt.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	1	4	6	57	69	16	6	1	–	–	6	1½	3	–	–	18	4½
2	2	9	–	58	71	1	–	1	1	–	6	4	3	1	–	18	7
3	3	13	6	59	72	5	6	1	2	–	6	6¾	3	2	–	18	9¾
4	4	18	–	60	73	10	–	1	3	–	6	9¼	3	3	–	19	–¼
5	6	2	6	61	74	14	6	1	4	–	7	–	3	4	–	19	3
6	7	7	–	62	75	19	–	1	5	–	7	2½	3	5	–	19	5½
7	8	11	6	63	77	3	6	1	6	–	7	5¼	3	6	–	19	8¼
8	9	16	–	64	78	8	–	1	7	–	7	7¾	3	7	–	19	10¾
9	11	–	6	65	79	12	6	1	8	–	7	10½	3	8	1	–	1½
10	12	5	–	66	80	17	–	1	9	–	8	1	3	9	1	–	4
11	13	9	6	67	82	1	6	1	10	–	8	3¾	3	10	1	–	6¾
12	14	14	–	68	83	6	–	1	11	–	8	6¼	3	11	1	–	9¼
13	15	18	6	69	84	10	6	1	12	–	8	9	3	12	1	1	–
14	17	3	–	70	85	15	–	1	13	–	8	11½	3	13	1	1	2½
15	18	7	6	71	86	19	6	1	14	–	9	2¼	3	14	1	1	5¼
16	19	12	–	72	88	4	–	1	15	–	9	4¾	3	15	1	1	7¾
17	20	16	6	73	89	8	6	1	16	–	9	7½	3	16	1	1	10½
18	22	1	–	74	90	13	–	1	17	–	9	10	3	17	1	2	1
19	23	5	6	75	91	17	6	1	18	–	10	–¾	3	18	1	2	3¾
20	24	10	–	76	93	2	–	1	19	–	10	3¼	3	19	1	2	6¼
21	25	14	6	77	94	6	6	1	20	–	10	6	3	20	1	2	9
22	26	19	–	78	95	11	–	1	21	–	10	8½	3	21	1	2	11½
23	28	3	6	79	96	15	6	1	22	–	10	11¼	3	22	1	3	2¼
24	29	8	–	80	98	–	–	1	23	–	11	1¾	3	23	1	3	4¾
25	30	12	6	81	99	4	6	1	24	–	11	4½	3	24	1	3	7½
26	31	17	–	82	100	9	–	1	25	–	11	7	3	25	1	3	10
27	33	1	6	83	101	13	6	1	26	–	11	9¾	3	26	1	4	–¾
28	34	6	–	84	102	18	–	1	27	–	12	–¼	3	27	1	4	3¼
29	35	10	6	85	104	2	6	2	—	–	12	3					
30	36	15	–	86	105	7	–	2	1	–	12	5½	0	1	–	–	2½
31	37	19	6	87	106	11	6	2	2	–	12	8¼	0	2	–	–	5¼
32	39	4	–	88	107	16	–	2	3	–	12	10¾	0	3	–	–	7¾
33	40	8	6	89	109	–	6	2	4	–	13	1½	0	4	–	–	10½
34	41	13	–	90	110	5	–	2	5	–	13	4	0	5	–	1	1
35	42	17	6	91	111	9	6	2	6	–	13	6¾	0	6	–	1	3¾
36	44	2	–	92	112	14	–	2	7	–	13	9¼	0	7	–	1	6¼
37	45	6	6	93	113	18	6	2	8	–	14	–	0	8	–	1	9
38	46	11	–	94	115	3	–	2	9	–	14	2½	0	9	–	1	11½
39	47	15	6	95	116	7	6	2	10	–	14	5¼	0	10	–	2	2¼
40	49	–	–	96	117	12	–	2	11	–	14	7¾	0	11	–	2	4¾
41	50	4	6	97	118	16	6	2	12	–	14	10½	0	12	–	2	7½
42	51	9	–	98	120	1	–	2	13	–	15	1	0	13	–	2	10
43	52	13	6	99	121	5	6	2	14	–	15	3¾	0	14	–	3	–¾
44	53	18	–	100	122	10	–	2	15	–	15	6¼	0	15	–	3	3¼
45	55	2	6	200	245	–	–	2	16	–	15	9	0	16	–	3	6
46	56	7	–	300	367	10	–	2	17	–	15	11½	0	17	–	3	8½
47	57	11	6	400	490	–	–	2	18	–	16	2¼	0	18	–	3	11¼
48	58	16	–	500	612	10	–	2	19	–	16	4¾	0	19	–	4	1¾
49	60	–	6	600	735	–	–	2	20	–	16	7½	0	20	–	4	4½
50	61	5	–	700	857	10	–	2	21	–	16	10	0	21	–	4	7
51	62	9	6	800	980	–	–	2	22	–	17	–¾	0	22	–	4	9¾
52	63	14	–	900	1102	10	–	2	23	–	17	3¼	0	23	–	5	–¼
53	64	18	6	1000	1225	–	–	2	24	–	17	6	0	24	–	5	3
54	66	3	–	2000	2450	–	–	2	25	–	17	8½	0	25	–	5	5½
55	67	7	6	3000	3675	–	–	2	26	–	17	11¼	0	26	–	5	8¼
56	68	12	–	4000	4900	–	–	2	27	–	18	1¾	0	27	–	5	10¾

25s. per Cwt. £25. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	5	–	57	71	5	–	1	–	–	6	3	3	–	–	18	9
2	2	10	–	58	72	10	–	1	1	–	6	5½	3	1	–	18	11½
3	3	15	–	59	73	15	–	1	2	–	6	8¼	3	2	–	19	2¼
4	5	–	–	60	75	–	–	1	3	–	6	11	3	3	–	19	5
5	6	5	–	61	76	5	–	1	4	–	7	1½	3	4	–	19	7½
6	7	10	–	62	77	10	–	1	5	–	7	4¼	3	5	–	19	10¼
7	8	15	–	63	78	15	–	1	6	–	7	7	3	6	1	–	1
8	10	–	–	64	80	–	–	1	7	–	7	9¾	3	7	1	–	3¾
9	11	5	–	65	81	5	–	1	8	–	8	–¼	3	8	1	–	6¼
10	12	10	–	66	82	10	–	1	9	–	8	3	3	9	1	–	9
11	13	15	–	67	83	15	–	1	10	–	8	5¾	3	10	1	–	11¾
12	15	–	–	68	85	–	–	1	11	–	8	8¼	3	11	1	1	2¼
13	16	5	–	69	86	5	–	1	12	–	8	11	3	12	1	1	5
14	17	10	–	70	87	10	–	1	13	–	9	1¾	3	13	1	1	7¾
15	18	15	–	71	88	15	–	1	14	–	9	4½	3	14	1	1	10½
16	20	–	–	72	90	–	–	1	15	–	9	7	3	15	1	2	1
17	21	5	–	73	91	5	–	1	16	–	9	9¾	3	16	1	2	3¾
18	22	10	–	74	92	10	–	1	17	–	10	–½	3	17	1	2	6½
19	23	15	–	75	93	15	–	1	18	–	10	3	3	18	1	2	9
20	25	–	–	76	95	–	–	1	19	–	10	5¾	3	19	1	2	11¾
21	26	5	–	77	96	5	–	1	20	–	10	8½	3	20	1	3	2½
22	27	10	–	78	97	10	–	1	21	–	10	11¼	3	21	1	3	5¼
23	28	15	–	79	98	15	–	1	22	–	11	1¾	3	22	1	3	7¾
24	30	–	–	80	100	–	–	1	23	–	11	4½	3	23	1	3	10½
25	31	5	–	81	101	5	–	1	24	–	11	7¼	3	24	1	4	1¼
26	32	10	–	82	102	10	–	1	25	–	11	9¾	3	25	1	4	3¾
27	33	15	–	83	103	15	–	1	26	–	12	–½	3	26	1	4	6½
28	35	–	–	84	105	–	–	1	27	–	12	3¼	3	27	1	4	9¼
29	36	5	–	85	106	5	–	2	—	–	12	6					
30	37	10	–	86	107	10	–	2	1	–	12	8½	0	1	–	–	2
31	38	15	–	87	108	15	–	2	2	–	12	11¼	0	2	–	–	5
32	40	–	–	88	110	–	–	2	3	–	13	2	0	3	–	–	8
33	41	5	–	89	111	5	–	2	4	–	13	4½	0	4	–	–	10
34	42	10	–	90	112	10	–	2	5	–	13	7¼	0	5	–	1	1
35	43	15	–	91	113	15	–	2	6	–	13	10	0	6	–	1	4
36	45	–	–	92	115	–	–	2	7	–	14	–¾	0	7	–	1	6
37	46	5	–	93	116	5	–	2	8	–	14	3¼	0	8	–	1	9
38	47	10	–	94	117	10	–	2	9	–	14	6	0	9	–	2	–
39	48	15	–	95	118	15	–	2	10	–	14	8¾	0	10	–	2	2
40	50	–	–	96	120	–	–	2	11	–	14	11¼	0	11	–	2	5
41	51	5	–	97	121	5	–	2	12	–	15	2	0	12	–	2	8
42	52	10	–	98	122	10	–	2	13	–	15	4¾	0	13	–	2	10
43	53	15	–	99	123	15	–	2	14	–	15	7½	0	14	–	3	1
44	55	–	–	100	125	–	–	2	15	–	15	10	0	15	–	3	4
45	56	5	–	200	250	–	–	2	16	–	16	–¾	0	16	–	3	6
46	57	10	–	300	375	–	–	2	17	–	16	3½	0	17	–	3	9
47	58	15	–	400	500	–	–	2	18	–	16	6	0	18	–	4	–
48	60	–	–	500	625	–	–	2	19	–	16	8¾	0	19	–	4	2
49	61	5	–	600	750	–	–	2	20	–	16	11½	0	20	–	4	5
50	62	10	–	700	875	–	–	2	21	–	17	2¼	0	21	–	4	8
51	63	15	–	800	1000	–	–	2	22	–	17	4¾	0	22	–	4	10
52	65	–	–	900	1125	–	–	2	23	–	17	7½	0	23	–	5	1
53	66	5	–	1000	1250	–	–	2	24	–	17	10¼	0	24	–	5	4
54	67	10	–	2000	2500	–	–	2	25	–	18	–¾	0	25	–	5	6
55	68	15	–	3000	3750	–	–	2	26	–	18	3½	0	26	–	5	9
56	70	–	–	4000	5000	–	–	2	27	–	18	6¼	0	27	–	6	–

£25. 10s. per Ton.

25*s*. 6*d*. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	5	6	57	72	13	6	1	–	–	6	4½	3	–	–	19	1½
2	2	11	–	58	73	19	–	1	1	–	6	7	3	1	–	19	4
3	3	16	6	59	75	4	6	1	2	–	6	9¾	3	2	–	19	6¾
4	5	2	–	60	76	10	–	1	3	–	7	–½	3	3	–	19	9½
5	6	7	6	61	77	15	6	1	4	–	7	3¼	3	4	1	–	–¼
6	7	13	–	62	79	1	–	1	5	–	7	6	3	5	1	–	3
7	8	18	6	63	80	6	6	1	6	–	7	8¾	3	6	1	–	5¾
8	10	4	–	64	81	12	–	1	7	–	7	11½	3	7	1	–	8½
9	11	9	6	65	82	17	6	1	8	–	8	2¼	3	8	1	–	11¼
10	12	15	–	66	84	3	–	1	9	–	8	5	3	9	1	1	2
11	14	–	6	67	85	8	6	1	10	–	8	7¾	3	10	1	1	4¾
12	15	6	–	68	86	14	–	1	11	–	8	10½	3	11	1	1	7½
13	16	11	6	69	87	19	6	1	12	–	9	1¼	3	12	1	1	10¼
14	17	17	–	70	89	5	–	1	13	–	9	4	3	13	1	2	1
15	19	2	6	71	90	10	6	1	14	–	9	6¾	3	14	1	2	3¾
16	20	8	–	72	91	16	–	1	15	–	9	9¼	3	15	1	2	6¼
17	21	13	6	73	93	1	6	1	16	–	10	–	3	16	1	2	9
18	22	19	–	74	94	7	–	1	17	–	10	2¾	3	17	1	2	11¾
19	24	4	6	75	95	12	6	1	18	–	10	5½	3	18	1	3	2½
20	25	10	–	76	96	18	–	1	19	–	10	8¼	3	19	1	3	5¼
21	26	15	6	77	98	3	6	1	20	–	10	11	3	20	1	3	8
22	28	1	–	78	99	9	–	1	21	–	11	1¾	3	21	1	3	10¾
23	29	6	6	79	100	14	6	1	22	–	11	4½	3	22	1	4	1½
24	30	12	–	80	102	–	–	1	23	–	11	7¼	3	23	1	4	4¼
25	31	17	6	81	103	5	6	1	24	–	11	10	3	24	1	4	7
26	33	3	–	82	104	11	–	1	25	–	12	–¾	3	25	1	4	9¾
27	34	8	6	83	105	16	6	1	26	–	12	3½	3	26	1	5	–½
28	35	14	–	84	107	2	–	1	27	–	12	6¼	3	27	1	5	3¼
29	36	19	6	85	108	7	6	2	—	–	12	9					
30	38	5	–	86	109	13	–	2	1	–	12	11½	0	1	–	–	2½
31	39	10	6	87	110	18	6	2	2	–	13	2¼	0	2	–	–	5¼
32	40	16	–	88	112	4	–	2	3	–	13	5	0	3	–	–	8
33	42	1	6	89	113	9	6	2	4	–	13	7¾	0	4	–	–	10¾
34	43	7	–	90	114	15	–	2	5	–	13	10½	0	5	–	1	1½
35	44	12	6	91	116	–	6	2	6	–	14	1¼	0	6	–	1	4¼
36	45	18	–	92	117	6	–	2	7	–	14	4	0	7	–	1	7
37	47	3	6	93	118	11	6	2	8	–	14	6¾	0	8	–	1	9¾
38	48	9	–	94	119	17	–	2	9	–	14	9½	0	9	–	2	–½
39	49	14	6	95	121	2	6	2	10	–	15	–¼	0	10	–	2	3¼
40	51	–	–	96	122	8	–	2	11	–	15	3	0	11	–	2	6
41	52	5	6	97	123	13	6	2	12	–	15	5¾	0	12	–	2	8¾
42	53	11	–	98	124	19	–	2	13	–	15	8½	0	13	–	2	11½
43	54	16	6	99	126	4	6	2	14	–	15	11¼	0	14	–	3	2¼
44	56	2	–	100	127	10	–	2	15	–	16	1¾	0	15	–	3	4¾
45	57	7	6	200	255	–	–	2	16	–	16	4½	0	16	–	3	7½
46	58	13	–	300	382	10	–	2	17	–	16	7¼	0	17	–	3	10¼
47	59	18	6	400	510	–	–	2	18	–	16	10	0	18	–	4	1
48	61	4	–	500	637	10	–	2	19	–	17	–¾	0	19	–	4	3¾
49	62	9	6	600	765	–	–	2	20	–	17	3½	0	20	–	4	6½
50	63	15	–	700	892	10	–	2	21	–	17	6¼	0	21	–	4	9¼
51	65	–	6	800	1020	–	–	2	22	–	17	9	0	22	–	5	–
52	66	6	–	900	1147	10	–	2	23	–	17	11¾	0	23	–	5	2¾
53	67	11	6	1000	1275	–	–	2	24	–	18	2½	0	24	–	5	5½
54	68	17	–	2000	2550	–	–	2	25	–	18	5¼	0	25	–	5	8¼
55	70	2	6	3000	3825	–	–	2	26	–	18	8	0	26	–	5	11
56	71	8	–	4000	5100	–	–	2	27	–	18	10¾	0	27	–	6	1¾

25s. 8d. *per Cwt.* 2¾d. *per lb.* £25. 13s. 4d. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	5	8	57	73	3	–	1	–	–	6	5	3	–	–	19	3
2	2	11	4	58	74	8	8	1	1	–	6	7¾	3	1	–	19	5¾
3	3	17	–	59	75	14	4	1	2	–	6	10½	3	2	–	19	8½
4	5	2	8	60	77	–	–	1	3	–	7	1¼	3	3	–	19	11¼
5	6	8	4	61	78	5	8	1	4	–	7	4	3	4	1	–	2
6	7	14	–	62	79	11	4	1	5	–	7	6¾	3	5	1	–	4¾
7	8	19	8	63	80	17	–	1	6	–	7	9½	3	6	1	–	7½
8	10	5	4	64	82	2	8	1	7	–	8	–¼	3	7	1	–	10¼
9	11	11	–	65	83	8	4	1	8	–	8	3	3	8	1	1	1
10	12	16	8	66	84	14	–	1	9	–	8	5¾	3	9	1	1	3¾
11	14	2	4	67	85	19	8	1	10	–	8	8½	3	10	1	1	6½
12	15	8	–	68	87	5	4	1	11	–	8	11¼	3	11	1	1	9¼
13	16	13	8	69	88	11	–	1	12	–	9	2	3	12	1	2	–
14	17	19	4	70	89	16	8	1	13	–	9	4¾	3	13	1	2	2¾
15	19	5	–	71	91	2	4	1	14	–	9	7½	3	14	1	2	5½
16	20	10	8	72	92	8	–	1	15	–	9	10¼	3	15	1	2	8¼
17	21	16	4	73	93	13	8	1	16	–	10	1	3	16	1	2	11
18	23	2	–	74	94	19	4	1	17	–	10	3¾	3	17	1	3	1¾
19	24	7	8	75	96	5	–	1	18	–	10	6½	3	18	1	3	4½
20	25	13	4	76	97	10	8	1	19	–	10	9¼	3	19	1	3	7¼
21	26	19	–	77	98	16	4	1	20	–	11	–	3	20	1	3	10
22	28	4	8	78	100	2	–	1	21	–	11	2¾	3	21	1	4	–¾
23	29	10	4	79	101	7	8	1	22	–	11	5½	3	22	1	4	3½
24	30	16	–	80	102	13	4	1	23	–	11	8¼	3	23	1	4	6¼
25	32	1	8	81	103	19	–	1	24	–	11	11	3	24	1	4	9
26	33	7	4	82	105	4	8	1	25	–	12	1¾	3	25	1	4	11¾
27	34	13	–	83	106	10	4	1	26	–	12	4½	3	26	1	5	2½
28	35	18	8	84	107	16	–	1	27	–	12	7¼	3	27	1	5	5¼
29	37	4	4	85	109	1	8	2	—	–	12	10					
30	38	10	–	86	110	7	4	2	1	–	13	–¾	0	1	–	–	2¾
31	39	15	8	87	111	13	–	2	2	–	13	3½	0	2	–	–	5½
32	41	1	4	88	112	18	8	2	3	–	13	6¼	0	3	–	–	8¼
33	42	7	–	89	114	4	4	2	4	–	13	9	0	4	–	–	11
34	43	12	8	90	115	10	–	2	5	–	13	11¾	0	5	–	1	1¾
35	44	18	4	91	116	15	8	2	6	–	14	2½	0	6	–	1	4½
36	46	4	–	92	118	1	4	2	7	–	14	5¼	0	7	–	1	7¼
37	47	9	8	93	119	7	–	2	8	–	14	8	0	8	–	1	10
38	48	15	4	94	120	12	8	2	9	–	14	10¾	0	9	–	2	–¾
39	50	1	–	95	121	18	4	2	10	–	15	1½	0	10	–	2	3½
40	51	6	8	96	123	4	–	2	11	–	15	4¼	0	11	–	2	6¼
41	52	12	4	97	124	9	8	2	12	–	15	7	0	12	–	2	9
42	53	18	–	98	125	15	4	2	13	–	15	9¾	0	13	–	2	11¾
43	55	3	8	99	127	1	–	2	14	–	16	–½	0	14	–	3	2½
44	56	9	4	100	128	6	8	2	15	–	16	3¼	0	15	–	3	5¼
45	57	15	–	200	256	13	4	2	16	–	16	6	0	16	–	3	8
46	59	–	8	300	385	–	–	2	17	–	16	8¾	0	17	–	3	10¾
47	60	6	4	400	513	6	8	2	18	–	16	11½	0	18	–	4	1½
48	61	12	–	500	641	13	4	2	19	–	17	2¼	0	19	–	4	4¼
49	62	17	8	600	770	–	–	2	20	–	17	5	0	20	–	4	7
50	64	3	4	700	898	6	8	2	21	–	17	7¾	0	21	–	4	9¾
51	65	9	–	800	1026	13	4	2	22	–	17	10½	0	22	–	5	–½
52	66	14	8	900	1155	–	–	2	23	–	18	1¼	0	23	–	5	3¼
53	68	–	4	1000	1283	6	8	2	24	–	18	4	0	24	–	5	6
54	69	6	–	2000	2566	13	4	2	25	–	18	6¾	0	25	–	5	8¾
55	70	11	8	3000	3850	–	–	2	26	–	18	9½	0	26	–	5	11½
56	71	17	4	4000	5133	6	8	2	27	–	19	–¼	0	27	–	6	2¼

£26. per Ton. 26*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	1	6	–	57	74	2	–	1	–	–	6	6	3	–	–	19	6
2	2	12	–	58	75	8	–	1	1	–	6	8¾	3	1	–	19	8¾
3	3	18	–	59	76	14	–	1	2	–	6	11½	3	2	–	19	11½
4	5	4	–	60	78	–	–	1	3	–	7	2¼	3	3	1	–	2¼
5	6	10	–	61	79	6	–	1	4	–	7	5	3	4	1	–	5
6	7	16	–	62	80	12	–	1	5	–	7	7¾	3	5	1	–	7¾
7	9	2	–	63	81	18	–	1	6	–	7	10½	3	6	1	–	10½
8	10	8	–	64	83	4	–	1	7	–	8	1½	3	7	1	1	1½
9	11	14	–	65	84	10	–	1	8	–	8	4¼	3	8	1	1	4¼
10	13	–	–	66	85	16	–	1	9	–	8	7	3	9	1	1	7
11	14	6	–	67	87	2	–	1	10	–	8	9¾	3	10	1	1	9¾
12	15	12	–	68	88	8	–	1	11	–	9	–½	3	11	1	2	–½
13	16	18	–	69	89	14	–	1	12	–	9	3¼	3	12	1	2	3¼
14	18	4	–	70	91	–	–	1	13	–	9	6	3	13	1	2	6
15	19	10	–	71	92	6	–	1	14	–	9	9	3	14	1	2	9
16	20	16	–	72	93	12	–	1	15	–	9	11¾	3	15	1	2	11¾
17	22	2	–	73	94	18	–	1	16	–	10	2½	3	16	1	3	2½
18	23	8	–	74	96	4	–	1	17	–	10	5¼	3	17	1	3	5¼
19	24	14	–	75	97	10	–	1	18	–	10	8	3	18	1	3	8
20	26	–	–	76	98	16	–	1	19	–	10	10¾	3	19	1	3	10¾
21	27	6	–	77	100	2	–	1	20	–	11	1½	3	20	1	4	1½
22	28	12	–	78	101	8	–	1	21	–	11	4½	3	21	1	4	4½
23	29	18	–	79	102	14	–	1	22	–	11	7¼	3	22	1	4	7¼
24	31	4	–	80	104	–	–	1	23	–	11	10	3	23	1	4	10
25	32	10	–	81	105	6	–	1	24	–	12	–¾	3	24	1	5	–¾
26	33	16	–	82	106	12	–	1	25	–	12	3½	3	25	1	5	3½
27	35	2	–	83	107	18	–	1	26	–	12	6¼	3	26	1	5	6¼
28	36	8	–	84	109	4	–	1	27	–	12	9	3	27	1	5	9
29	37	14	–	85	110	10	–	2	—	–	13	–					
30	39	–	–	86	111	16	–	2	1	–	13	2¾	0	1	–	–	2¾
31	40	6	–	87	113	2	–	2	2	–	13	5½	0	2	–	–	5½
32	41	12	–	88	114	8	–	2	3	–	13	8¼	0	3	–	–	8¼
33	42	18	–	89	115	14	–	2	4	–	13	11	0	4	–	–	11
34	44	4	–	90	117	–	–	2	5	–	14	1¾	0	5	–	1	1¾
35	45	10	–	91	118	6	–	2	6	–	14	4½	0	6	–	1	4½
36	46	16	–	92	119	12	–	2	7	–	14	7½	0	7	–	1	7½
37	48	2	–	93	120	18	–	2	8	–	14	10¼	0	8	–	1	10¼
38	49	8	–	94	122	4	–	2	9	–	15	1	0	9	–	2	1
39	50	14	–	95	123	10	–	2	10	–	15	3¾	0	10	–	2	3¾
40	52	–	–	96	124	16	–	2	11	–	15	6½	0	11	–	2	6½
41	53	6	–	97	126	2	–	2	12	–	15	9¼	0	12	–	2	9¼
42	54	12	–	98	127	8	–	2	13	–	16	–	0	13	–	3	–
43	55	18	–	99	128	14	–	2	14	–	16	3	0	14	–	3	3
44	57	4	–	100	130	–	–	2	15	–	16	5¾	0	15	–	3	5¾
45	58	10	–	200	260	–	–	2	16	–	16	8½	0	16	–	3	8½
46	59	16	–	300	390	–	–	2	17	–	16	11¼	0	17	–	3	11¼
47	61	2	–	400	520	–	–	2	18	–	17	2	0	18	–	4	2
48	62	8	–	500	650	–	–	2	19	–	17	4¾	0	19	–	4	4¾
49	63	14	–	600	780	–	–	2	20	–	17	7½	0	20	–	4	7½
50	65	–	–	700	910	–	–	2	21	–	17	10½	0	21	–	4	10½
51	66	6	–	800	1040	–	–	2	22	–	18	1¼	0	22	–	5	1¼
52	67	12	–	900	1170	–	–	2	23	–	18	4	0	23	–	5	4
53	68	18	–	1000	1300	–	–	2	24	–	18	6¾	0	24	–	5	6¾
54	70	4	–	2000	2600	–	–	2	25	–	18	9½	0	25	–	5	9½
55	71	10	–	3000	3900	–	–	2	26	–	19	–¼	0	26	–	6	–¼
56	72	16	–	4000	5200	–	–	2	27	–	19	3	0	27	–	6	3

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	6	6	57	75	10	6	1	–	–	6	7½	3	–	–	19	10½
2	2	13	–	58	76	17	–	1	1	–	6	10¼	3	1	1	–	1¼
3	3	19	6	59	78	3	6	1	2	–	7	1	3	2	1	–	4
4	5	6	–	60	79	10	–	1	3	–	7	4	3	3	1	–	7
5	6	12	6	61	80	16	6	1	4	–	7	6¾	3	4	1	–	9¾
6	7	19	–	62	82	3	–	1	5	–	7	9½	3	5	1	1	–½
7	9	5	6	63	83	9	6	1	6	–	8	–½	3	6	1	1	3½
8	10	12	–	64	84	16	–	1	7	–	8	3¼	3	7	1	1	6¼
9	11	18	6	65	86	2	6	1	8	–	8	6	3	8	1	1	9
10	13	5	–	66	87	9	–	1	9	–	8	9	3	9	1	2	–
11	14	11	6	67	88	15	6	1	10	–	8	11¾	3	10	1	2	2¾
12	15	18	–	68	90	2	–	1	11	–	9	2½	3	11	1	2	5½
13	17	4	6	69	91	8	6	1	12	–	9	5½	3	12	1	2	8½
14	18	11	–	70	92	15	–	1	13	–	9	8¼	3	13	1	2	11¼
15	19	17	6	71	94	1	6	1	14	–	9	11¼	3	14	1	3	2¼
16	21	4	–	72	95	8	–	1	15	–	10	2	3	15	1	3	5
17	22	10	6	73	96	14	6	1	16	–	10	4¾	3	16	1	3	7¾
18	23	17	–	74	98	1	–	1	17	–	10	7¾	3	17	1	3	10¾
19	25	3	6	75	99	7	6	1	18	–	10	10½	3	18	1	4	1½
20	26	10	–	76	100	14	–	1	19	–	11	1¼	3	19	1	4	4¼
21	27	16	6	77	102	–	6	1	20	–	11	4¼	3	20	1	4	7¼
22	29	3	–	78	103	7	–	1	21	–	11	7	3	21	1	4	10
23	30	9	6	79	104	13	6	1	22	–	11	9¾	3	22	1	5	–¾
24	31	16	–	80	106	–	–	1	23	–	12	–¾	3	23	1	5	3¾
25	33	2	6	81	107	6	6	1	24	–	12	3½	3	24	1	5	6½
26	34	9	–	82	108	13	–	1	25	–	12	6¼	3	25	1	5	9¼
27	35	15	6	83	109	19	6	1	26	–	12	9¼	3	26	1	6	–¼
28	37	2	–	84	111	6	–	1	27	–	13	–	3	27	1	6	3
29	38	8	6	85	112	12	6	2	—	–	13	3					
30	39	15	–	86	113	19	–	2	1	–	13	5¾	0	1	–	–	2¾
31	41	1	6	87	115	5	6	2	2	–	13	8½	0	2	–	–	5½
32	42	8	–	88	116	12	–	2	3	–	13	11½	0	3	–	–	8½
33	43	14	6	89	117	18	6	2	4	–	14	2¼	0	4	–	–	11¼
34	45	1	–	90	119	5	–	2	5	–	14	5	0	5	–	1	2
35	46	7	6	91	120	11	6	2	6	–	14	8	0	6	–	1	5
36	47	14	–	92	121	18	–	2	7	–	14	10¾	0	7	–	1	7¾
37	49	–	6	93	123	4	6	2	8	–	15	1½	0	8	–	1	10½
38	50	7	–	94	124	11	–	2	9	–	15	4½	0	9	–	2	1½
39	51	13	6	95	125	17	6	2	10	–	15	7¼	0	10	–	2	4¼
40	53	–	–	96	127	4	–	2	11	–	15	10	0	11	–	2	7
41	54	6	6	97	128	10	6	2	12	–	16	1	0	12	–	2	10
42	55	13	–	98	129	17	–	2	13	–	16	3¾	0	13	–	3	–¾
43	56	19	6	99	131	3	6	2	14	–	16	6¾	0	14	–	3	3¾
44	58	6	–	100	132	10	–	2	15	–	16	9½	0	15	–	3	6½
45	59	12	6	200	265	–	–	2	16	–	17	–¼	0	16	–	3	9¼
46	60	19	–	300	397	10	–	2	17	–	17	3¼	0	17	–	4	–¼
47	62	5	6	400	530	–	–	2	18	–	17	6	0	18	–	4	3
48	63	12	–	500	662	10	–	2	19	–	17	8¾	0	19	–	4	5¾
49	64	18	6	600	795	–	–	2	20	–	17	11¾	0	20	–	4	8¾
50	66	5	–	700	927	10	–	2	21	–	18	2½	0	21	–	4	11½
51	67	11	6	800	1060	–	–	2	22	–	18	5¼	0	22	–	5	2¼
52	68	18	–	900	1192	10	–	2	23	–	18	8¼	0	23	–	5	5¼
53	70	4	6	1000	1325	–	–	2	24	–	18	11	0	24	–	5	8
54	71	11	–	2000	2650	–	–	2	25	–	19	1¾	0	25	–	5	10¾
55	72	17	6	3000	3975	–	–	2	26	–	19	4¾	0	26	–	6	1¾
56	74	4	–	4000	5300	–	–	2	27	–	19	7½	0	27	–	6	4½

£27. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.
1	1	7	–	57	76	19	–
2	2	14	–	58	78	6	–
3	4	1	–	59	79	13	–
4	5	8	–	60	81	–	–
5	6	15	–	61	82	7	–
6	8	2	–	62	83	14	–
7	9	9	–	63	85	1	–
8	10	16	–	64	86	8	–
9	12	3	–	65	87	15	–
10	13	10	–	66	89	2	–
11	14	17	–	67	90	9	–
12	16	4	–	68	91	16	–
13	17	11	–	69	93	3	–
14	18	18	–	70	94	10	–
15	20	5	–	71	95	17	–
16	21	12	–	72	97	4	–
17	22	19	–	73	98	11	–
18	24	6	–	74	99	18	–
19	25	13	–	75	101	5	–
20	27	–	–	76	102	12	–
21	28	7	–	77	103	19	–
22	29	14	–	78	105	6	–
23	31	1	–	79	106	13	–
24	32	8	–	80	108	–	–
25	33	15	–	81	109	7	–
26	35	2	–	82	110	14	–
27	36	9	–	83	112	1	–
28	37	16	–	84	113	8	–
29	39	3	–	85	114	15	–
30	40	10	–	86	116	2	–
31	41	17	–	87	117	9	–
32	43	4	–	88	118	16	–
33	44	11	–	89	120	3	–
34	45	18	–	90	121	10	–
35	47	5	–	91	122	17	–
36	48	12	–	92	124	4	–
37	49	19	–	93	125	11	–
38	51	6	–	94	126	18	–
39	52	13	–	95	128	5	–
40	54	–	–	96	129	12	–
41	55	7	–	97	130	19	–
42	56	14	–	98	132	6	–
43	58	1	–	99	133	13	–
44	59	8	–	100	135	–	–
45	60	15	–	200	270	–	–
46	62	2	–	300	405	–	–
47	63	9	–	400	540	–	–
48	64	16	–	500	675	–	–
49	66	3	–	600	810	–	–
50	67	10	–	700	945	–	–
51	68	17	–	800	1080	–	–
52	70	4	–	900	1215	–	–
53	71	11	–	1000	1350	–	–
54	72	18	–	2000	2700	–	–
55	74	5	–	3000	4050	–	–
56	75	12	–	4000	5400	–	–

27*s. per Cwt.*

qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	–	–	6	9	3	–	1	–	3
1	1	–	6	11¾	3	1	1	–	5¾
1	2	–	7	2¾	3	2	1	–	8¾
1	3	–	7	5½	3	3	1	–	11½
1	4	–	7	8½	3	4	1	1	2½
1	5	–	7	11¼	3	5	1	1	5¼
1	6	–	8	2¼	3	6	1	1	8¼
1	7	–	8	5¼	3	7	1	1	11¼
1	8	–	8	8	3	8	1	2	2
1	9	–	8	11	3	9	1	2	5
1	10	–	9	1¾	3	10	1	2	7¾
1	11	–	9	4¾	3	11	1	2	10¾
1	12	–	9	7½	3	12	1	3	1½
1	13	–	9	10½	3	13	1	3	4½
1	14	–	10	1½	3	14	1	3	7½
1	15	–	10	4¼	3	15	1	3	10¼
1	16	–	10	7¼	3	16	1	4	1¼
1	17	–	10	10	3	17	1	4	4
1	18	–	11	1	3	18	1	4	7
1	19	–	11	3¾	3	19	1	4	9¾
1	20	–	11	6¾	3	20	1	5	–¾
1	21	–	11	9¾	3	21	1	5	3¾
1	22	–	12	–½	3	22	1	5	6½
1	23	–	12	3½	3	23	1	5	9½
1	24	–	12	6¼	3	24	1	6	–¼
1	25	–	12	9¼	3	25	1	6	3¼
1	26	–	13	–	3	26	1	6	6
1	27	–	13	3	3	27	1	6	9
2	—	–	13	6					
2	1	–	13	8¾	0	1	–	–	2¾
2	2	–	13	11¾	0	2	–	–	5¾
2	3	–	14	2½	0	3	–	–	8½
2	4	–	14	5½	0	4	–	–	11½
2	5	–	14	8¼	0	5	–	1	2¼
2	6	–	14	11¼	0	6	–	1	5¼
2	7	–	15	2¼	0	7	–	1	8¼
2	8	–	15	5	0	8	–	1	11
2	9	–	15	8	0	9	–	2	2
2	10	–	15	10¾	0	10	–	2	4¾
2	11	–	16	1¾	0	11	–	2	7¾
2	12	–	16	4½	0	12	–	2	10½
2	13	–	16	7½	0	13	–	3	1½
2	14	–	16	10½	0	14	–	3	4½
2	15	–	17	1¼	0	15	–	3	7¼
2	16	–	17	4¼	0	16	–	3	10¼
2	17	–	17	7	0	17	–	4	1
2	18	–	17	10	0	18	–	4	4
2	19	–	18	–¾	0	19	–	4	6¾
2	20	–	18	3¾	0	20	–	4	9¾
2	21	–	18	6¾	0	21	–	5	–¾
2	22	–	18	9½	0	22	–	5	3½
2	23	–	19	–½	0	23	–	5	6½
2	24	–	19	3¼	0	24	–	5	9¼
2	25	–	19	6¼	0	25	–	6	–¼
2	26	–	19	9	0	26	–	6	3
2	27	1	–	–	0	27	–	6	6

27*s*. 6*d*. *per Cwt*. £27. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	7	6	57	78	7	6	1	–	–	6	10½	3	–	1	–	7½
2	2	15	–	58	79	15	–	1	1	–	7	1¼	3	1	1	–	10¼
3	4	2	6	59	81	2	6	1	2	–	7	4¼	3	2	1	1	1¼
4	5	10	–	60	82	10	–	1	3	–	7	7¼	3	3	1	1	4¼
5	6	17	6	61	83	17	6	1	4	–	7	10¼	3	4	1	1	7¼
6	8	5	–	62	85	5	–	1	5	–	8	1	3	5	1	1	10
7	9	12	6	63	86	12	6	1	6	–	8	4	3	6	1	2	1
8	11	–	–	64	88	–	–	1	7	–	8	7	3	7	1	2	4
9	12	7	6	65	89	7	6	1	8	–	8	10	3	8	1	2	7
10	13	15	–	66	90	15	–	1	9	–	9	1	3	9	1	2	10
11	15	2	6	67	92	2	6	1	10	–	9	3¾	3	10	1	3	–¾
12	16	10	–	68	93	10	–	1	11	–	9	6¾	3	11	1	3	3¾
13	17	17	6	69	94	17	6	1	12	–	9	9¾	3	12	1	3	6¾
14	19	5	–	70	96	5	–	1	13	–	10	–¾	3	13	1	3	9¾
15	20	12	6	71	97	12	6	1	14	–	10	3¾	3	14	1	4	–¾
16	22	–	–	72	99	–	–	1	15	–	10	6½	3	15	1	4	3½
17	23	7	6	73	100	7	6	1	16	–	10	9½	3	16	1	4	6½
18	24	15	–	74	101	15	–	1	17	–	11	–½	3	17	1	4	9½
19	26	2	6	75	103	2	6	1	18	–	11	3½	3	18	1	5	–½
20	27	10	–	76	104	10	–	1	19	–	11	6¼	3	19	1	5	3¼
21	28	17	6	77	105	17	6	1	20	–	11	9¼	3	20	1	5	6¼
22	30	5	–	78	107	5	–	1	21	–	12	–¼	3	21	1	5	9¼
23	31	12	6	79	108	12	6	1	22	–	12	3¼	3	22	1	6	–¼
24	33	–	–	80	110	–	–	1	23	–	12	6¼	3	23	1	6	3¼
25	34	7	6	81	111	7	6	1	24	–	12	9	3	24	1	6	6
26	35	15	–	82	112	15	–	1	25	–	13	–	3	25	1	6	9
27	37	2	6	83	114	2	6	1	26	–	13	3	3	26	1	7	–
28	38	10	–	84	115	10	–	1	27	–	13	6	3	27	1	7	3
29	39	17	6	85	116	17	6	2	—	–	13	9					
30	41	5	–	86	118	5	–	2	1	–	13	11¾	0	1	–	–	2¾
31	42	12	6	87	119	12	6	2	2	–	14	2¾	0	2	–	–	5¾
32	44	–	–	88	121	–	–	2	3	–	14	5¾	0	3	–	–	8¾
33	45	7	6	89	122	7	6	2	4	–	14	8¾	0	4	–	–	11¾
34	46	15	–	90	123	15	–	2	5	–	14	11½	0	5	–	1	2½
35	48	2	6	91	125	2	6	2	6	–	15	2½	0	6	–	1	5½
36	49	10	–	92	126	10	–	2	7	–	15	5½	0	7	–	1	8½
37	50	17	6	93	127	17	6	2	8	–	15	8½	0	8	–	1	11½
38	52	5	–	94	129	5	–	2	9	–	15	11½	0	9	–	2	2½
39	53	12	6	95	130	12	6	2	10	–	16	2¼	0	10	–	2	5¼
40	55	–	–	96	132	–	–	2	11	–	16	5¼	0	11	–	2	8¼
41	56	7	6	97	133	7	6	2	12	–	16	8¼	0	12	–	2	11¼
42	57	15	–	98	134	15	–	2	13	–	16	11¼	0	13	–	3	2¼
43	59	2	6	99	136	2	6	2	14	–	17	2¼	0	14	–	3	5¼
44	60	10	–	100	137	10	–	2	15	–	17	5	0	15	–	3	8
45	61	17	6	200	275	–	–	2	16	–	17	8	0	16	–	3	11
46	63	5	–	300	412	10	–	2	17	–	17	11	0	17	–	4	2
47	64	12	6	400	550	–	–	2	18	–	18	2	0	18	–	4	5
48	66	–	–	500	687	10	–	2	19	–	18	4¾	0	19	–	4	7¾
49	67	7	6	600	825	–	–	2	20	–	18	7¾	0	20	–	4	10¾
50	68	15	–	700	962	10	–	2	21	–	18	10¾	0	21	–	5	1¾
51	70	2	6	800	1100	–	–	2	22	–	19	1¾	0	22	–	5	4¾
52	71	10	–	900	1237	10	–	2	23	–	19	4¾	0	23	–	5	7¾
53	72	17	6	1000	1375	–	–	2	24	–	19	7½	0	24	–	5	10½
54	74	5	–	2000	2750	–	–	2	25	–	19	10½	0	25	–	6	1½
55	75	12	6	3000	4125	–	–	2	26	1	–	1½	0	26	–	6	4½
56	77	–	–	4000	5500	–	–	2	27	1	–	4½	0	27	–	6	7½

£28. per Ton. *3d. per lb.* *28s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	8	–	57	79	16	–	1	–	–	7	–	3	–	1	1	–
2	2	16	–	58	81	4	–	1	1	–	7	3	3	1	1	1	3
3	4	4	–	59	82	12	–	1	2	–	7	6	3	2	1	1	6
4	5	12	–	60	84	–	–	1	3	–	7	9	3	3	1	1	9
5	7	–	–	61	85	8	–	1	4	–	8	–	3	4	1	2	–
6	8	8	–	62	86	16	–	1	5	–	8	3	3	5	1	2	3
7	9	16	–	63	88	4	–	1	6	–	8	6	3	6	1	2	6
8	11	4	–	64	89	12	–	1	7	–	8	9	3	7	1	2	9
9	12	12	–	65	91	–	–	1	8	–	9	–	3	8	1	3	–
10	14	–	–	66	92	8	–	1	9	–	9	3	3	9	1	3	3
11	15	8	–	67	93	16	–	1	10	–	9	6	3	10	1	3	6
12	16	16	–	68	95	4	–	1	11	–	9	9	3	11	1	3	9
13	18	4	–	69	96	12	–	1	12	–	10	–	3	12	1	4	–
14	19	12	–	70	98	–	–	1	13	–	10	3	3	13	1	4	3
15	21	–	–	71	99	8	–	1	14	–	10	6	3	14	1	4	6
16	22	8	–	72	100	16	–	1	15	–	10	9	3	15	1	4	9
17	23	16	–	73	102	4	–	1	16	–	11	–	3	16	1	5	–
18	25	4	–	74	103	12	–	1	17	–	11	3	3	17	1	5	3
19	26	12	–	75	105	–	–	1	18	–	11	6	3	18	1	5	6
20	28	–	–	76	106	8	–	1	19	–	11	9	3	19	1	5	9
21	29	8	–	77	107	16	–	1	20	–	12	–	3	20	1	6	–
22	30	16	–	78	109	4	–	1	21	–	12	3	3	21	1	6	3
23	32	4	–	79	110	12	–	1	22	–	12	6	3	22	1	6	6
24	33	12	–	80	112	–	–	1	23	–	12	9	3	23	1	6	9
25	35	–	–	81	118	8	–	1	24	–	13	–	3	24	1	7	–
26	36	8	–	82	114	16	–	1	25	–	13	3	3	25	1	7	3
27	37	16	–	83	116	4	–	1	26	–	13	6	3	26	1	7	6
28	39	4	–	84	117	12	–	1	27	–	13	9	3	27	1	7	9
29	40	12	–	85	119	–	–	2	—	–	14	–					
30	42	–	–	86	120	8	–	2	1	–	14	3	0	1	–	–	3
31	43	8	–	87	121	16	–	2	2	–	14	6	0	2	–	–	6
32	44	16	–	88	123	4	–	2	3	–	14	9	0	3	–	–	9
33	46	4	–	89	124	12	–	2	4	–	15	–	0	4	–	1	–
34	47	12	–	90	126	–	–	2	5	–	15	3	0	5	–	1	3
35	49	–	–	91	127	8	–	2	6	–	15	6	0	6	–	1	6
36	50	8	–	92	128	16	–	2	7	–	15	9	0	7	–	1	9
37	51	16	–	93	130	4	–	2	8	–	16	–	0	8	–	2	–
38	53	4	–	94	131	12	–	2	9	–	16	3	0	9	–	2	3
39	54	12	–	95	133	–	–	2	10	–	16	6	0	10	–	2	6
40	56	–	–	96	134	8	–	2	11	–	16	9	0	11	–	2	9
41	57	8	–	97	135	16	–	2	12	–	17	–	0	12	–	3	–
42	58	16	–	98	137	4	–	2	13	–	17	3	0	13	–	3	3
43	60	4	–	99	138	12	–	2	14	–	17	6	0	14	–	3	6
44	61	12	–	100	140	–	–	2	15	–	17	9	0	15	–	3	9
45	63	–	–	200	280	–	–	2	16	–	18	–	0	16	–	4	–
46	64	8	–	300	420	–	–	2	17	–	18	3	0	17	–	4	3
47	65	16	–	400	560	–	–	2	18	–	18	6	0	18	–	4	6
48	67	4	–	500	700	–	–	2	19	–	18	9	0	19	–	4	9
49	68	12	–	600	840	–	–	2	20	–	19	–	0	20	–	5	–
50	70	–	–	700	980	–	–	2	21	–	19	3	0	21	–	5	3
51	71	8	–	800	1120	–	–	2	22	–	19	6	0	22	–	5	6
52	72	16	–	900	1260	–	–	2	23	–	19	9	0	23	–	5	9
53	74	4	–	1000	1400	–	–	2	24	1	–	–	0	24	–	6	–
54	75	12	–	2000	2800	–	–	2	25	1	–	3	0	25	–	6	3
55	77	–	–	3000	4200	–	–	2	26	1	–	6	0	26	–	6	6
56	78	8	–	4000	5600	–	–	2	27	1	–	9	0	27	–	6	9

28*s*. 6*d*. *per Cwt.*

£28. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	1	8	6	57	81	4	6	1	-	-	7	1½	3	-	1	1	4½
2	2	17	-	58	82	13	-	1	1	-	7	4½	3	1	1	1	7½
3	4	5	6	59	84	1	6	1	2	-	7	7½	3	2	1	1	10½
4	5	14	-	60	85	10	-	1	3	-	7	10½	3	3	1	2	1½
5	7	2	6	61	86	18	6	1	4	-	8	1½	3	4	1	2	4½
6	8	11	-	62	88	7	-	1	5	-	8	4¾	3	5	1	2	7¾
7	9	19	6	63	89	15	6	1	6	-	8	7¾	3	6	1	2	10¾
8	11	8	-	64	91	4	-	1	7	-	8	10¾	3	7	1	3	1¾
9	12	16	6	65	92	12	6	1	8	-	9	1¾	3	8	1	3	4¾
10	14	5	-	66	94	1	-	1	9	-	9	4¾	3	9	1	3	7¾
11	15	13	6	67	95	9	6	1	10	-	9	8	3	10	1	3	11
12	17	2	-	68	96	18	-	1	11	-	9	11	3	11	1	4	2
13	18	10	6	69	98	6	6	1	12	-	10	2	3	12	1	4	5
14	19	19	-	70	99	15	-	1	13	-	10	5	3	13	1	4	8
15	21	7	6	71	101	3	6	1	14	-	10	8¼	3	14	1	4	11¼
16	22	16	-	72	102	12	-	1	15	-	10	11¼	3	15	1	5	2¼
17	24	4	6	73	104	-	6	1	16	-	11	2¼	3	16	1	5	5¼
18	25	13	-	74	105	9	-	1	17	-	11	5¼	3	17	1	5	8¼
19	27	1	6	75	106	17	6	1	18	-	11	8¼	3	18	1	5	11¼
20	28	10	-	76	108	6	-	1	19	-	11	11½	3	19	1	6	2½
21	29	18	6	77	109	14	6	1	20	-	12	2½	3	20	1	6	5½
22	31	7	-	78	111	3	-	1	21	-	12	5½	3	21	1	6	8½
23	32	15	6	79	112	11	6	1	22	-	12	8½	3	22	1	6	11½
24	34	4	-	80	114	-	-	1	23	-	12	11½	3	23	1	7	2½
25	35	12	6	81	115	8	6	1	24	-	13	2¾	3	24	1	7	5¾
26	37	1	-	82	116	17	-	1	25	-	13	5¾	3	25	1	7	8¾
27	38	9	6	83	118	5	6	1	26	-	13	8¾	3	26	1	7	11¾
28	39	18	-	84	119	14	-	1	27	-	13	11¾	3	27	1	8	2¾
29	41	6	6	85	121	2	6	2	—	-	14	3					
30	42	15	-	86	122	11	-	2	1	-	14	6	0	1	-	-	3
31	44	3	6	87	123	19	6	2	2	-	14	9	0	2	-	-	6
32	45	12	-	88	125	8	-	2	3	-	15	-	0	3	-	-	9
33	47	-	6	89	126	16	6	2	4	-	15	3	0	4	-	1	-
34	48	9	-	90	128	5	-	2	5	-	15	6¼	0	5	-	1	3¼
35	49	17	6	91	129	13	6	2	6	-	15	9¼	0	6	-	1	6¼
36	51	6	-	92	131	2	-	2	7	-	16	-¼	0	7	-	1	9¼
37	52	14	6	93	132	10	6	2	8	-	16	3¼	0	8	-	2	-¼
38	54	3	-	94	133	19	-	2	9	-	16	6¼	0	9	-	2	3¼
39	55	11	6	95	135	7	6	2	10	-	16	9½	0	10	-	2	6½
40	57	-	-	96	136	16	-	2	11	-	17	-½	0	11	-	2	9½
41	58	8	6	97	138	4	6	2	12	-	17	3½	0	12	-	3	-½
42	59	17	-	98	139	13	-	2	13	-	17	6½	0	13	-	3	3½
43	61	5	6	99	141	1	6	2	14	-	17	9¾	0	14	-	3	6¾
44	62	14	-	100	142	10	-	2	15	-	18	-¾	0	15	-	3	9¾
45	64	2	6	200	285	-	-	2	16	-	18	3¾	0	16	-	4	-¾
46	65	11	-	300	427	10	-	2	17	-	18	6¾	0	17	-	4	3¾
47	66	19	6	400	570	-	-	2	18	-	18	9¾	0	18	-	4	6¾
48	68	8	-	500	712	10	-	2	19	-	19	1	0	19	-	4	10
49	69	16	6	600	855	-	-	2	20	-	19	4	0	20	-	5	1
50	71	5	-	700	997	10	-	2	21	-	19	7	0	21	-	5	4
51	72	13	6	800	1140	-	-	2	22	-	19	10	0	22	-	5	7
52	74	2	-	900	1282	10	-	2	23	1	-	1	0	23	-	5	10
53	75	10	6	1000	1425	-	-	2	24	1	-	4¼	0	24	-	6	1¼
54	76	19	-	2000	2850	-	-	2	25	1	-	7¼	0	25	-	6	4¼
55	78	7	6	3000	4275	-	-	2	26	1	-	10¼	0	26	-	6	7¼
56	79	16	-	4000	5700	-	-	2	27	1	1	1¼	0	27	-	6	10¼

£29. per Ton.

29s. per Cwt.

Cwt.	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	1	9	–	57	82	13	–	1	–	–	7	3	3	–	1	1	9
2	2	18	–	58	84	2	–	1	1	–	7	6	3	1	1	2	–
3	4	7	–	59	85	11	–	1	2	–	7	9	3	2	1	2	3
4	5	16	–	60	87	–	–	1	3	–	8	–¼	3	3	1	2	6¼
5	7	5	–	61	88	9	–	1	4	–	8	3¼	3	4	1	2	9¼
6	8	14	–	62	89	18	–	1	5	–	8	6½	3	5	1	3	–½
7	10	3	–	63	91	7	–	1	6	–	8	9½	3	6	1	3	3½
8	11	12	–	64	92	16	–	1	7	–	9	–¾	3	7	1	3	6¾
9	13	1	–	65	94	5	–	1	8	–	9	3¾	3	8	1	3	9¾
10	14	10	–	66	95	14	–	1	9	–	9	6¾	3	9	1	4	–¾
11	15	19	–	67	97	3	–	1	10	–	9	10	3	10	1	4	4
12	17	8	–	68	98	12	–	1	11	–	10	1	3	11	1	4	7
13	18	17	–	69	100	1	–	1	12	–	10	4¼	3	12	1	4	10¼
14	20	6	–	70	101	10	–	1	13	–	10	7¼	3	13	1	5	1¼
15	21	15	–	71	102	19	–	1	14	–	10	10½	3	14	1	5	4½
16	23	4	–	72	104	8	–	1	15	–	11	1½	3	15	1	5	7½
17	24	13	–	73	105	17	–	1	16	–	11	4½	3	16	1	5	10½
18	26	2	–	74	107	6	–	1	17	–	11	7¾	3	17	1	6	1¾
19	27	11	–	75	108	15	–	1	18	–	11	10¾	3	18	1	6	4¾
20	29	–	–	76	110	4	–	1	19	–	12	2	3	19	1	6	8
21	30	9	–	77	111	13	–	1	20	–	12	5	3	20	1	6	11
22	31	18	–	78	113	2	–	1	21	–	12	8¼	3	21	1	7	2¼
23	33	7	–	79	114	11	–	1	22	–	12	11¼	3	22	1	7	5¼
24	34	16	–	80	116	–	–	1	23	–	13	2¼	3	23	1	7	8¼
25	36	5	–	81	117	9	–	1	24	–	13	5½	3	24	1	7	11½
26	37	14	–	82	118	18	–	1	25	–	13	8½	3	25	1	8	2½
27	39	3	–	83	120	7	–	1	26	–	13	11¾	3	26	1	8	5¾
28	40	12	–	84	121	16	–	1	27	–	14	2¾	3	27	1	8	8¾
29	42	1	–	85	123	5	–	2	—	–	14	6					
30	43	10	–	86	124	14	–	2	1	–	14	9	0	1	–	–	3
31	44	19	–	87	126	3	–	2	2	–	15	–	0	2	–	–	6
32	46	8	–	88	127	12	–	2	3	–	15	3¼	0	3	–	–	9¼
33	47	17	–	89	129	1	–	2	4	–	15	6¼	0	4	–	1	–¼
34	49	6	–	90	130	10	–	2	5	–	15	9½	0	5	–	1	3½
35	50	15	–	91	131	19	–	2	6	–	16	–½	0	6	–	1	6½
36	52	4	–	92	133	8	–	2	7	–	16	3¾	0	7	–	1	9¾
37	53	13	–	93	134	17	–	2	8	–	16	6¾	0	8	–	2	–¾
38	55	2	–	94	136	6	–	2	9	–	16	9¾	0	9	–	2	3¾
39	56	11	–	95	137	15	–	2	10	–	17	1	0	10	–	2	7
40	58	–	–	96	139	4	–	2	11	–	17	4	0	11	–	2	10
41	59	9	–	97	140	13	–	2	12	–	17	7¼	0	12	–	3	1¼
42	60	18	–	98	142	2	–	2	13	–	17	10¼	0	13	–	3	4¼
43	62	7	–	99	143	11	–	2	14	–	18	1½	0	14	–	8	7½
44	63	16	–	100	145	–	–	2	15	–	18	4½	0	15	–	3	10½
45	65	5	–	200	290	–	–	2	16	–	18	7½	0	16	–	4	1½
46	66	14	–	300	435	–	–	2	17	–	18	10¾	0	17	–	4	4¾
47	68	3	–	400	580	–	–	2	18	–	19	1¾	0	18	–	4	7¾
48	69	12	–	500	725	–	–	2	19	–	19	5	0	19	–	4	11
49	71	1	–	600	870	–	–	2	20	–	19	8	0	20	–	5	2
50	72	10	–	700	1015	–	–	2	21	–	19	11¼	0	21	–	5	5¼
51	73	19	–	800	1160	–	–	2	22	1	–	2¼	0	22	–	5	8¼
52	75	8	–	900	1305	–	–	2	23	1	–	5¼	0	23	–	5	11¼
53	76	17	–	1000	1450	–	–	2	24	1	–	8½	0	24	–	6	2½
54	78	6	–	2000	2900	–	–	2	25	1	–	11½	0	25	–	6	5½
55	79	15	–	3000	4350	–	–	2	26	1	1	2¾	0	26	–	6	8¾
56	81	4	–	4000	5800	–	–	2	27	1	1	5¾	0	27	–	6	11¾

29*s*. 6*d*. *per Cwt*. **£29. 10*s*. *per Ton*.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	9	6	57	84	1	6	1	–	–	7	4½	3	–	1	2	1½
2	2	19	–	58	85	11	–	1	1	–	7	7½	3	1	1	2	4½
3	4	8	6	59	87	–	6	1	2	–	7	10¾	3	2	1	2	7¾
4	5	18	–	60	88	10	–	1	3	–	8	1¾	3	3	1	2	10¾
5	7	7	6	61	89	19	6	1	4	–	8	5	3	4	1	3	2
6	8	17	–	62	91	9	–	1	5	–	8	8¼	3	5	1	3	5¼
7	10	6	6	63	92	18	6	1	6	–	8	11¼	3	6	1	3	8¼
8	11	16	–	64	94	8	–	1	7	–	9	2½	3	7	1	3	11½
9	13	5	6	65	95	17	6	1	8	–	9	5¾	3	8	1	4	2¾
10	14	15	–	66	97	7	–	1	9	–	9	8¾	3	9	1	4	5¾
11	16	4	6	67	98	16	6	1	10	–	10	–	3	10	1	4	9
12	17	14	–	68	100	6	–	1	11	–	10	3¼	3	11	1	5	–¼
13	19	3	6	69	101	15	6	1	12	–	10	6¼	3	12	1	5	3¼
14	20	13	–	70	103	5	–	1	13	–	10	9½	3	13	1	5	6½
15	22	2	6	71	104	14	6	1	14	–	11	–¾	3	14	1	5	9¾
16	23	12	–	72	106	4	–	1	15	–	11	3¾	3	15	1	6	–¾
17	25	1	6	73	107	13	6	1	16	–	11	7	3	16	1	6	4
18	26	11	–	74	109	3	–	1	17	–	11	10	3	17	1	6	7
19	28	–	6	75	110	12	6	1	18	–	12	1¼	3	18	1	6	10¼
20	29	10	–	76	112	2	–	1	19	–	12	4½	3	19	1	7	1½
21	30	19	6	77	113	11	6	1	20	–	12	7½	3	20	1	7	4½
22	32	9	–	78	115	1	–	1	21	–	12	10¾	3	21	1	7	7¾
23	33	18	6	79	116	10	6	1	22	–	13	2	3	22	1	7	11
24	35	8	–	80	118	–	–	1	23	–	13	5	3	23	1	8	2
25	36	17	6	81	119	9	6	1	24	–	13	8¼	3	24	1	8	5¼
26	38	7	–	82	120	19	–	1	25	–	13	11½	3	25	1	8	8½
27	39	16	6	83	122	8	6	1	26	–	14	2½	3	26	1	8	11½
28	41	6	–	84	123	18	–	1	27	–	14	5¾	3	27	1	9	2¾
29	42	16	6	85	125	7	6	2	—	–	14	9					
30	44	5	–	86	126	17	–	2	1	–	15	–	0	1	–	–	3
31	45	14	6	87	128	6	6	2	2	–	15	3¼	0	2	–	–	6¼
32	47	4	–	88	129	16	–	2	3	–	15	6¼	0	3	–	–	9¼
33	48	13	6	89	131	5	6	2	4	–	15	9½	0	4	–	1	–½
34	50	3	–	90	132	15	–	2	5	–	16	–¾	0	5	–	1	3¾
35	51	12	6	91	134	4	6	2	6	–	16	3¾	0	6	–	1	6¾
36	53	2	–	92	135	14	–	2	7	–	16	7	0	7	–	1	10
37	54	11	6	93	137	3	6	2	8	–	16	10¼	0	8	–	2	1¼
38	56	1	–	94	138	13	–	2	9	–	17	1¼	0	9	–	2	4¼
39	57	10	6	95	140	2	6	2	10	–	17	4½	0	10	–	2	7½
40	59	–	–	96	141	12	–	2	11	–	17	7¾	0	11	–	2	10¾
41	60	9	6	97	143	1	6	2	12	–	17	10¾	0	12	–	3	1¾
42	61	19	–	98	144	11	–	2	13	–	18	2	0	13	–	3	5
43	63	8	6	99	146	–	6	2	14	–	18	5¼	0	14	–	3	8¼
44	64	18	–	100	147	10	–	2	15	–	18	8¼	0	15	–	3	11¼
45	66	7	6	200	295	–	–	2	16	–	18	11½	0	16	–	4	2½
46	67	17	–	300	442	10	–	2	17	–	19	2½	0	17	–	4	5½
47	69	6	6	400	590	–	–	2	18	–	19	5¾	0	18	–	4	8¾
48	70	16	–	500	737	10	–	2	19	–	19	9	0	19	–	5	–
49	72	5	6	600	885	–	–	2	20	1	–	–	0	20	–	5	3
50	73	15	–	700	1032	10	–	2	21	1	–	3¼	0	21	–	5	6¼
51	75	4	6	800	1180	–	–	2	22	1	–	6½	0	22	–	5	9½
52	76	14	–	900	1327	10	–	2	23	1	–	9½	0	23	–	6	–½
53	78	3	6	1000	1475	–	–	2	24	1	1	–¾	0	24	–	6	3¾
54	79	13	–	2000	2950	–	–	2	25	1	1	4	0	25	–	6	7
55	81	2	6	3000	4425	–	–	2	26	1	1	7	0	26	–	6	10
56	82	12	–	4000	5900	–	–	2	27	1	1	10¼	0	27	–	7	1¼

£30. per Ton. **30*s*. *per Cwt*.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	10	~	57	85	10	~	1	~	~	7	6	3	~	1	2	6
2	3	~	~	58	87	~	~	1	1	~	7	9	3	1	1	2	9
3	4	10	~	59	88	10	~	1	2	~	8	~¼	3	2	1	3	~¼
4	6	~	~	60	90	~	~	1	3	~	8	3½	3	3	1	3	3½
5	7	10	~	61	91	10	~	1	4	~	8	6¾	3	4	1	3	6¾
6	9	~	~	62	93	~	~	1	5	~	8	10	3	5	1	3	10
7	10	10	~	63	94	10	~	1	6	~	9	1¼	3	6	1	4	1¼
8	12	~	~	64	96	~	~	1	7	~	9	4½	3	7	1	4	4½
9	13	10	~	65	97	10	~	1	8	~	9	7½	3	8	1	4	7½
10	15	~	~	66	99	~	~	1	9	~	9	10¾	3	9	1	4	10¾
11	16	10	~	67	100	10	~	1	10	~	10	2	3	10	1	5	2
12	18	~	~	68	102	~	~	1	11	~	10	5¼	3	11	1	5	5¼
13	19	10	~	69	103	10	~	1	12	~	10	8½	3	12	1	5	8½
14	21	~	~	70	105	~	~	1	13	~	10	11¾	3	13	1	5	11¾
15	22	10	~	71	106	10	~	1	14	~	11	3	3	14	1	6	3
16	24	~	~	72	108	~	~	1	15	~	11	6	3	15	1	6	6
17	25	10	~	73	109	10	~	1	16	~	11	9¼	3	16	1	6	9¼
18	27	~	~	74	111	~	~	1	17	~	12	~½	3	17	1	7	~½
19	28	10	~	75	112	10	~	1	18	~	12	3¾	3	18	1	7	3¾
20	30	~	~	76	114	~	~	1	19	~	12	7	3	19	1	7	7
21	31	10	~	77	115	10	~	1	20	~	12	10¼	3	20	1	7	10¼
22	33	~	~	78	117	~	~	1	21	~	13	1½	3	21	1	8	1½
23	34	10	~	79	118	10	~	1	22	~	13	4½	3	22	1	8	4½
24	36	~	~	80	120	~	~	1	23	~	13	7¾	3	23	1	8	7¾
25	37	10	~	81	121	10	~	1	24	~	13	11	3	24	1	8	11
26	39	~	~	82	123	~	~	1	25	~	14	2¼	3	25	1	9	2¼
27	40	10	~	83	124	10	~	1	26	~	14	5½	3	26	1	9	5½
28	42	~	~	84	126	~	~	1	27	~	14	8¾	3	27	1	9	8¾
29	43	10	~	85	127	10	~	2	—	~	15	~	——→		———		
30	45	~	~	86	129	~	~	2	1	~	15	3	0	1	~	~	3
31	46	10	~	87	130	10	~	2	2	~	15	6¼	0	2	~	~	6¼
32	48	~	~	88	132	~	~	2	3	~	15	9½	0	3	~	~	9½
33	49	10	~	89	133	10	~	2	4	~	16	~¾	0	4	~	1	~¾
34	51	~	~	90	135	~	~	2	5	~	16	4	0	5	~	1	4
35	52	10	~	91	136	10	~	2	6	~	16	7¼	0	6	~	1	7¼
36	54	~	~	92	138	~	~	2	7	~	16	10½	0	7	~	1	10½
37	55	10	~	93	139	10	~	2	8	~	17	1½	0	8	~	2	1½
38	57	~	~	94	141	~	~	2	9	~	17	4¾	0	9	~	2	4¾
39	58	10	~	95	142	10	~	2	10	~	17	8	0	10	~	2	8
40	60	~	~	96	144	~	~	2	11	~	17	11¼	0	11	~	2	11¼
41	61	10	~	97	145	10	~	2	12	~	18	2½	0	12	~	3	2½
42	63	~	~	98	147	~	~	2	13	~	18	5¾	0	13	~	3	5¾
43	64	10	~	99	148	10	~	2	14	~	18	9	0	14	~	3	9
44	66	~	~	100	150	~	~	2	15	~	19	~	0	15	~	4	~
45	67	10	~	200	300	~	~	2	16	~	19	3¼	0	16	~	4	3¼
46	69	~	~	300	450	~	~	2	17	~	19	6½	0	17	~	4	6½
47	70	10	~	400	600	~	~	2	18	~	19	9¾	0	18	~	4	9¾
48	72	~	~	500	750	~	~	2	19	1	~	1	0	19	~	5	1
49	73	10	~	600	900	~	~	2	20	1	~	4¼	0	20	~	5	4¼
50	75	~	~	700	1050	~	~	2	21	1	~	7½	0	21	~	5	7½
51	76	10	~	800	1200	~	~	2	22	1	~	10½	0	22	~	5	10½
52	78	~	~	900	1350	~	~	2	23	1	1	1¾	0	23	~	6	1¾
53	79	10	~	1000	1500	~	~	2	24	1	1	5	0	24	~	6	5
54	81	~	~	2000	3000	~	~	2	25	1	1	8¼	0	25	~	6	8¼
55	82	10	~	3000	4500	~	~	2	26	1	1	11½	0	26	~	6	11½
56	84	~	~	4000	6000	~	~	2	27	1	2	2¾	0	27	~	7	2¾

30*s*. 4*d*. *per Cwt.* 3¼*d*. *per lb.* £30. 6*s*. 8*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	10	4	57	86	9	–	1	–	–	7	7	3	–	1	2	9
2	3	–	8	58	87	19	4	1	1	–	7	10¼	3	1	1	3	–¼
3	4	11	–	59	89	9	8	1	2	–	8	1½	3	2	1	3	3½
4	6	1	4	60	91	–	–	1	3	–	8	4¾	3	3	1	3	6¾
5	7	11	8	61	92	10	4	1	4	–	8	8	3	4	1	3	10
6	9	2	–	62	94	–	8	1	5	–	8	11¼	3	5	1	4	1¼
7	10	12	4	63	95	11	–	1	6	–	9	2½	3	6	1	4	4½
8	12	2	8	64	97	1	4	1	7	–	9	5¾	3	7	1	4	7¾
9	13	13	–	65	98	11	8	1	8	–	9	9	3	8	1	4	11
10	15	3	4	66	100	2	–	1	9	–	10	–¼	3	9	1	5	2¼
11	16	13	8	67	101	12	4	1	10	–	10	3½	3	10	1	5	5½
12	18	4	–	68	103	2	8	1	11	–	10	6¾	3	11	1	5	8¾
13	19	14	4	69	104	13	–	1	12	–	10	10	3	12	1	6	–
14	21	4	8	70	106	3	4	1	13	–	11	1¼	3	13	1	6	3¼
15	22	15	–	71	107	13	8	1	14	–	11	4½	3	14	1	6	6½
16	24	5	4	72	109	4	–	1	15	–	11	7¾	3	15	1	6	9¾
17	25	15	8	73	110	14	4	1	16	–	11	11	3	16	1	7	1
18	27	6	–	74	112	4	8	1	17	–	12	2¼	3	17	1	7	4¼
19	28	16	4	75	113	15	–	1	18	–	12	5½	3	18	1	7	7½
20	30	6	8	76	115	5	4	1	19	–	12	8¾	3	19	1	7	10¾
21	31	17	–	77	116	15	8	1	20	–	13	–	3	20	1	8	2
22	33	7	4	78	118	6	–	1	21	–	13	3¼	3	21	1	8	5¼
23	34	17	8	79	119	16	4	1	22	–	13	6½	3	22	1	8	8½
24	36	8	–	80	121	6	8	1	23	–	13	9¾	3	23	1	8	11¾
25	37	18	4	81	122	17	–	1	24	–	14	1	3	24	1	9	3
26	39	8	8	82	124	7	4	1	25	–	14	4¼	3	25	1	9	6¼
27	40	19	–	83	125	17	8	1	26	–	14	7½	3	26	1	9	9½
28	42	9	4	84	127	8	–	1	27	–	14	10¾	3	27	1	10	–¾
29	43	19	8	85	128	18	4	2	—	–	15	2					
30	45	10	–	86	130	8	8	2	1	–	15	5¼	0	1	–	–	3¼
31	47	–	4	87	131	19	–	2	2	–	15	8½	0	2	–	–	6½
32	48	10	8	88	133	9	4	2	3	–	15	11¾	0	3	–	–	9¾
33	50	1	–	89	134	19	8	2	4	–	16	3	0	4	–	1	1
34	51	11	4	90	136	10	–	2	5	–	16	6¼	0	5	–	1	4¼
35	53	1	8	91	138	–	4	2	6	–	16	9½	0	6	–	1	7½
36	54	12	–	92	139	10	8	2	7	–	17	–¾	0	7	–	1	10¾
37	56	2	4	93	141	1	–	2	8	–	17	4	0	8	–	2	2
38	57	12	8	94	142	11	4	2	9	–	17	7¼	0	9	–	2	5¼
39	59	3	–	95	144	1	8	2	10	–	17	10½	0	10	–	2	8½
40	60	13	4	96	145	12	–	2	11	–	18	1¾	0	11	–	2	11¾
41	62	3	8	97	147	2	4	2	12	–	18	5	0	12	–	3	3
42	63	14	–	98	148	12	8	2	13	–	18	8¼	0	13	–	3	6¼
43	65	4	4	99	150	3	–	2	14	–	18	11½	0	14	–	3	9½
44	66	14	8	100	151	13	4	2	15	–	19	2¾	0	15	–	4	–¾
45	68	5	–	200	303	6	8	2	16	–	19	6	0	16	–	4	4
46	69	15	4	300	455	–	–	2	17	–	19	9¼	0	17	–	4	7¼
47	71	5	8	400	606	13	4	2	18	1	–	–½	0	18	–	4	10½
48	72	16	–	500	758	6	8	2	19	1	–	3¾	0	19	–	5	1¾
49	74	6	4	600	910	–	–	2	20	1	–	7	0	20	–	5	5
50	75	16	8	700	1061	13	4	2	21	1	–	10¼	0	21	–	5	8¼
51	77	7	–	800	1213	6	8	2	22	1	1	1½	0	22	–	5	11½
52	78	17	4	900	1365	–	–	2	23	1	1	4¾	0	23	–	6	2¾
53	80	7	8	1000	1516	13	4	2	24	1	1	8	0	24	–	6	6
54	81	18	–	2000	3033	6	8	2	25	1	1	11¼	0	25	–	6	9¼
55	83	8	4	3000	4550	–	–	2	26	1	2	2½	0	26	–	7	–½
56	84	18	8	4000	6066	13	4	2	27	1	2	5¾	0	27	–	7	3¾

30s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	10	6	57	86	18	6	1	–	–	7	7½	3	–	1	2	10½
2	3	1	–	58	88	9	–	1	1	–	7	10¾	3	1	1	3	1¾
3	4	11	6	59	89	19	6	1	2	–	8	2	3	2	1	3	5
4	6	2	–	60	91	10	–	1	3	–	8	5¼	3	3	1	3	8¼
5	7	12	6	61	93	–	6	1	4	–	8	8½	3	4	1	3	11½
6	9	3	–	62	94	11	–	1	5	–	8	11¾	3	5	1	4	2¾
7	10	13	6	63	96	1	6	1	6	–	9	3	3	6	1	4	6
8	12	4	–	64	97	12	–	1	7	–	9	6¼	3	7	1	4	9¼
9	13	14	6	65	99	2	6	1	8	–	9	9½	3	8	1	5	–½
10	15	5	–	66	100	13	–	1	9	–	10	–¾	3	9	1	5	3¾
11	16	15	6	67	102	3	6	1	10	–	10	4	3	10	1	5	7
12	18	6	–	68	103	14	–	1	11	–	10	7¼	3	11	1	5	10¼
13	19	16	6	69	105	4	6	1	12	–	10	10½	3	12	1	6	1½
14	21	7	–	70	106	15	–	1	13	–	11	1¾	3	13	1	6	4¾
15	22	17	6	71	108	5	6	1	14	–	11	5¼	3	14	1	6	8¼
16	24	8	–	72	109	16	–	1	15	–	11	8½	3	15	1	6	11½
17	25	18	6	73	111	6	6	1	16	–	11	11¾	3	16	1	7	2¾
18	27	9	–	74	112	17	–	1	17	–	12	3	3	17	1	7	6
19	28	19	6	75	114	7	6	1	18	–	12	6¼	3	18	1	7	9¼
20	30	10	–	76	115	18	–	1	19	–	12	9½	3	19	1	8	–½
21	32	–	6	77	117	8	6	1	20	–	13	–¾	3	20	1	8	3¾
22	33	11	–	78	118	19	–	1	21	–	13	4	3	21	1	8	7
23	35	1	6	79	120	9	6	1	22	–	13	7¼	3	22	1	8	10¼
24	36	12	–	80	122	–	–	1	23	–	13	10½	3	23	1	9	1½
25	38	2	6	81	123	10	6	1	24	–	14	1¾	3	24	1	9	4¾
26	39	13	–	82	125	1	–	1	25	–	14	5	3	25	1	9	8
27	41	3	6	83	126	11	6	1	26	–	14	8¼	3	26	1	9	11¼
28	42	14	–	84	128	2	–	1	27	–	14	11½	3	27	1	10	2½
29	44	4	6	85	129	12	6	2	—	–	15	3					
30	45	15	–	86	131	3	–	2	1	–	15	6¼	0	1	–	–	3¼
31	47	5	6	87	132	13	6	2	2	–	15	9½	0	2	–	–	6½
32	48	16	–	88	134	4	–	2	3	–	16	–¾	0	3	–	–	9¾
33	50	6	6	89	135	14	6	2	4	–	16	4	0	4	–	1	1
34	51	17	–	90	137	5	–	2	5	–	16	7¼	0	5	–	1	4¼
35	53	7	6	91	138	15	6	2	6	–	16	10½	0	6	–	1	7½
36	54	18	–	92	140	6	–	2	7	–	17	1¾	0	7	–	1	10¾
37	56	8	6	93	141	16	6	2	8	–	17	5	0	8	–	2	2
38	57	19	–	94	143	7	–	2	9	–	17	8¼	0	9	–	2	5¼
39	59	9	6	95	144	17	6	2	10	–	17	11½	0	10	–	2	8½
40	61	–	–	96	146	8	–	2	11	–	18	2¾	0	11	–	2	11¾
41	62	10	6	97	147	18	6	2	12	–	18	6	0	12	–	3	3
42	64	1	–	98	149	9	–	2	13	–	18	9¼	0	13	–	3	6¼
43	65	11	6	99	150	19	6	2	14	–	19	–¾	0	14	–	3	9¾
44	67	2	–	100	152	10	–	2	15	–	19	4	0	15	–	4	1
45	68	12	6	200	305	–	–	2	16	–	19	7¼	0	16	–	4	4¼
46	70	3	–	300	457	10	–	2	17	–	19	10½	0	17	–	4	7½
47	71	13	6	400	610	–	–	2	18	1	–	1¾	0	18	–	4	10¾
48	73	4	–	500	762	10	–	2	19	1	–	5	0	19	–	5	2
49	74	14	6	600	915	–	–	2	20	1	–	8¼	0	20	–	5	5¼
50	76	5	–	700	1067	10	–	2	21	1	–	11½	0	21	–	5	8½
51	77	15	6	800	1220	–	–	2	22	1	1	2¾	0	22	–	5	11¾
52	79	6	–	900	1372	10	–	2	23	1	1	6	0	23	–	6	3
53	80	16	6	1000	1525	–	–	2	24	1	1	9¼	0	24	–	6	6¼
54	82	7	–	2000	3050	–	–	2	25	1	2	–½	0	25	–	6	9½
55	83	17	6	3000	4575	–	–	2	26	1	2	3¾	0	26	–	7	–¾
56	85	8	–	4000	6100	–	–	2	27	1	2	7	0	27	–	7	4

31*s*. *per Cwt*. £31. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	11	~	57	88	7	~	1	~	~	7	9	3	~	1	3	3
2	3	2	~	58	89	18	~	1	1	~	8	~¼	3	1	1	3	6¼
3	4	13	~	59	91	9	~	1	2	~	8	3½	3	2	1	3	9½
4	6	4	~	60	93	~	~	1	3	~	8	6¾	3	3	1	4	~¾
5	7	15	~	61	94	11	~	1	4	~	8	10¼	3	4	1	4	4¼
6	9	6	~	62	96	2	~	1	5	~	9	1½	3	5	1	4	7½
7	10	17	~	63	97	13	~	1	6	~	9	4¾	3	6	1	4	10¾
8	12	8	~	64	99	4	~	1	7	~	9	8¼	3	7	1	5	2¼
9	13	19	~	65	100	15	~	1	8	~	9	11½	3	8	1	5	5½
10	15	10	~	66	102	6	~	1	9	~	10	2¾	3	9	1	5	8¾
11	17	1	~	67	103	17	~	1	10	~	10	6	3	10	1	6	~
12	18	12	~	68	105	8	~	1	11	~	10	9½	3	11	1	6	3½
13	20	3	~	69	106	19	~	1	12	~	11	~¾	3	12	1	6	6¾
14	21	14	~	70	108	10	~	1	13	~	11	4	3	13	1	6	10
15	23	5	~	71	110	1	~	1	14	~	11	7½	3	14	1	7	1½
16	24	16	~	72	111	12	~	1	15	~	11	10¾	3	15	1	7	4¾
17	26	7	~	73	113	3	~	1	16	~	12	2	3	16	1	7	8
18	27	18	~	74	114	14	~	1	17	~	12	5¼	3	17	1	7	11¼
19	29	9	~	75	116	5	~	1	18	~	12	8¾	3	18	1	8	2¾
20	31	~	~	76	117	16	~	1	19	~	13	~	3	19	1	8	6
21	32	11	~	77	119	7	~	1	20	~	13	3¼	3	20	1	8	9¼
22	34	2	~	78	120	18	~	1	21	~	13	6¾	3	21	1	9	~¾
23	35	13	~	79	122	9	~	1	22	~	13	10	3	22	1	9	4
24	37	4	~	80	124	~	~	1	23	~	14	1¼	3	23	1	9	7¼
25	38	15	~	81	125	11	~	1	24	~	14	4½	3	24	1	9	10½
26	40	6	~	82	127	2	~	1	25	~	14	8	3	25	1	10	2
27	41	17	~	83	128	13	~	1	26	~	14	11¼	3	26	1	10	5¼
28	43	8	~	84	130	4	~	1	27	~	15	2½	3	27	1	10	8½
29	44	19	~	85	131	15	~	2	—	~	15	6					
30	46	10	~	86	133	6	~	2	1	~	15	9¼	0	1	~	~	3¼
31	48	1	~	87	134	17	~	2	2	~	16	~½	0	2	~	~	6½
32	49	12	~	88	136	8	~	2	3	~	16	3¾	0	3	~	~	9¾
33	51	3	~	89	137	19	~	2	4	~	16	7¼	0	4	~	1	1¼
34	52	14	~	90	139	10	~	2	5	~	16	10½	0	5	~	1	4½
35	54	5	~	91	141	1	~	2	6	~	17	1¾	0	6	~	1	7¾
36	55	16	~	92	142	12	~	2	7	~	17	5¼	0	7	~	1	11¼
37	57	7	~	93	144	3	~	2	8	~	17	8½	0	8	~	2	2½
38	58	18	~	94	145	14	~	2	9	~	17	11¾	0	9	~	2	5¾
39	60	9	~	95	147	5	~	2	10	~	18	3	0	10	~	2	9
40	62	~	~	96	148	16	~	2	11	~	18	6½	0	11	~	3	~½
41	63	11	~	97	150	7	~	2	12	~	18	9¾	0	12	~	3	3¾
42	65	2	~	98	151	18	~	2	13	~	19	1	0	13	~	3	7
43	66	13	~	99	153	9	~	2	14	~	19	4½	0	14	~	3	10½
44	68	4	~	100	155	~	~	2	15	~	19	7¾	0	15	~	4	1¾
45	69	15	~	200	310	~	~	2	16	~	19	11	0	16	~	4	5
46	71	6	~	300	465	~	~	2	17	1	~	2¼	0	17	~	4	8¼
47	72	17	~	400	620	~	~	2	18	1	~	5¾	0	18	~	4	11¾
48	74	8	~	500	775	~	~	2	19	1	~	9	0	19	~	5	3
49	75	19	~	600	930	~	~	2	20	1	1	~¼	0	20	~	5	6¼
50	77	10	~	700	1085	~	~	2	21	1	1	3¾	0	21	~	5	9¾
51	79	1	~	800	1240	~	~	2	22	1	1	7	0	22	~	6	1
52	80	12	~	900	1395	~	~	2	23	1	1	10¼	0	23	~	6	4¼
53	82	3	~	1000	1550	~	~	2	24	1	2	1½	0	24	~	6	7½
54	83	14	~	2000	3100	~	~	2	25	1	2	5	0	25	~	6	11
55	85	5	~	3000	4650	~	~	2	26	1	2	8¼	0	26	~	7	2¼
56	86	16	~	4000	6200	~	~	2	27	1	2	11½	0	27	~	7	5½

31s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	11	6	57	89	15	6	1	–	–	7	10½	3	–	1	3	7½
2	3	3	–	58	91	7	–	1	1	–	8	1¾	3	1	1	3	10¾
3	4	14	6	59	92	18	6	1	2	–	8	5¼	3	2	1	4	2¼
4	6	6	–	60	94	10	–	1	3	–	8	8½	3	3	1	4	5½
5	7	17	6	61	96	1	6	1	4	–	9	–	3	4	1	4	9
6	9	9	–	62	97	13	–	1	5	–	9	3¼	3	5	1	5	–¼
7	11	–	6	63	99	4	6	1	6	–	9	6¾	3	6	1	5	3¾
8	12	12	–	64	100	16	–	1	7	–	9	10	3	7	1	5	7
9	14	3	6	65	102	7	6	1	8	–	10	1½	3	8	1	5	10½
10	15	15	–	66	103	19	–	1	9	–	10	4¾	3	9	1	6	1¾
11	17	6	6	67	105	10	6	1	10	–	10	8¼	3	10	1	6	5¼
12	18	18	–	68	107	2	–	1	11	–	10	11½	3	11	1	6	8½
13	20	9	6	69	108	13	6	1	12	–	11	3	3	12	1	7	–
14	22	1	–	70	110	5	–	1	13	–	11	6¼	3	13	1	7	3¼
15	23	12	6	71	111	16	6	1	14	–	11	9¾	3	14	1	7	6¾
16	25	4	–	72	113	8	–	1	15	–	12	1	3	15	1	7	10
17	26	15	6	73	114	19	6	1	16	–	12	4½	3	16	1	8	1½
18	28	7	–	74	116	11	–	1	17	–	12	7¾	3	17	1	8	4¾
19	29	18	6	75	118	2	6	1	18	–	12	11¼	3	18	1	8	8¼
20	31	10	–	76	119	14	–	1	19	–	13	2½	3	19	1	8	11½
21	33	1	6	77	121	5	6	1	20	–	13	6	3	20	1	9	3
22	34	13	–	78	122	17	–	1	21	–	13	9¼	3	21	1	9	6¼
23	36	4	6	79	124	8	6	1	22	–	14	–¾	3	22	1	9	9¾
24	37	16	–	80	126	–	–	1	23	–	14	4	3	23	1	10	1
25	39	7	6	81	127	11	6	1	24	–	14	7½	3	24	1	10	4½
26	40	19	–	82	129	3	–	1	25	–	14	10¾	3	25	1	10	7¾
27	42	10	6	83	130	14	6	1	26	–	15	2¼	3	26	1	10	11¼
28	44	2	–	84	132	6	–	1	27	–	15	5½	3	27	1	11	2½
29	45	13	6	85	133	17	6	2	—	–	15	9					
30	47	5	–	86	135	9	–	2	1	–	16	–¼	0	1	–	–	3¼
31	48	16	6	87	137	–	6	2	2	–	16	3¾	0	2	–	–	6¾
32	50	8	–	88	138	12	–	2	3	–	16	7	0	3	–	–	10
33	51	19	6	89	140	3	6	2	4	–	16	10½	0	4	–	1	1½
34	53	11	–	90	141	15	–	2	5	–	17	1¾	0	5	–	1	4¾
35	55	2	6	91	143	6	6	2	6	–	17	5¼	0	6	–	1	8¼
36	56	14	–	92	144	18	–	2	7	–	17	8½	0	7	–	1	11½
37	58	5	6	93	146	9	6	2	8	–	18	–	0	8	–	2	3
38	59	17	–	94	148	1	–	2	9	–	18	3¼	0	9	–	2	6¼
39	61	8	6	95	149	12	6	2	10	–	18	6¾	0	10	–	2	9¾
40	63	–	–	96	151	4	–	2	11	–	18	10	0	11	–	3	1
41	64	11	6	97	152	15	6	2	12	–	19	1½	0	12	–	3	4½
42	66	3	–	98	154	7	–	2	13	–	19	4¾	0	13	–	3	7¾
43	67	14	6	99	155	18	6	2	14	–	19	8¼	0	14	–	3	11¼
44	69	6	–	100	157	10	–	2	15	–	19	11½	0	15	–	4	2½
45	70	17	6	200	315	–	–	2	16	1	–	3	0	16	–	4	6
46	72	9	–	300	472	10	–	2	17	1	–	6¼	0	17	–	4	9¼
47	74	–	6	400	630	–	–	2	18	1	–	9¾	0	18	–	5	–¾
48	75	12	–	500	787	10	–	2	19	1	1	1	0	19	–	5	4
49	77	3	6	600	945	–	–	2	20	1	1	4½	0	20	–	5	7½
50	78	15	–	700	1102	10	–	2	21	1	1	7¾	0	21	–	5	10¾
51	80	6	6	800	1260	–	–	2	22	1	1	11¼	0	22	–	6	2¼
52	81	18	–	900	1417	10	–	2	23	1	2	2½	0	23	–	6	5½
53	83	9	6	1000	1575	–	–	2	24	1	2	6	0	24	–	6	9
54	85	1	–	2000	3150	–	–	2	25	1	2	9¼	0	25	–	7	–¼
55	86	12	6	3000	4725	–	–	2	26	1	3	–¾	0	26	–	7	3¾
56	88	4	–	4000	6300	–	–	2	27	1	3	4	0	27	–	7	7

32*s*. *per Cwt.* £32. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	1	12	–	57	91	4	–	1	–	–	8	–	3	–	1	4	–
2	3	4	–	58	92	16	–	1	1	–	8	3¼	3	1	1	4	3¼
3	4	16	–	59	94	8	–	1	2	–	8	6¾	3	2	1	4	6¾
4	6	8	–	60	96	–	–	1	3	–	8	10¼	3	3	1	4	10¼
5	8	–	–	61	97	12	–	1	4	–	9	1½	3	4	1	5	1½
6	9	12	–	62	99	4	–	1	5	–	9	5	3	5	1	5	5
7	11	4	–	63	100	16	–	1	6	–	9	8½	3	6	1	5	8½
8	12	16	–	64	102	8	–	1	7	–	10	–	3	7	1	6	–
9	14	8	–	65	104	–	–	1	8	–	10	3¼	3	8	1	6	3¼
10	16	–	–	66	105	12	–	1	9	–	10	6¾	3	9	1	6	6¾
11	17	12	–	67	107	4	–	1	10	–	10	10¼	3	10	1	6	10¼
12	19	4	–	68	108	16	–	1	11	–	11	1½	3	11	1	7	1½
13	20	16	–	69	110	8	–	1	12	–	11	5	3	12	1	7	5
14	22	8	–	70	112	–	–	1	13	–	11	8½	3	13	1	7	8½
15	24	–	–	71	113	12	–	1	14	–	12	–	3	14	1	8	–
16	25	12	–	72	115	4	–	1	15	–	12	3¼	3	15	1	8	3¼
17	27	4	–	73	116	16	–	1	16	–	12	6¾	3	16	1	8	6¾
18	28	16	–	74	118	8	–	1	17	–	12	10¼	3	17	1	8	10¼
19	30	8	–	75	120	–	–	1	18	–	13	1½	3	18	1	9	1½
20	32	–	–	76	121	12	–	1	19	–	13	5	3	19	1	9	5
21	33	12	–	77	123	4	–	1	20	–	13	8½	3	20	1	9	8½
22	35	4	–	78	124	16	–	1	21	–	14	–	3	21	1	10	–
23	36	16	–	79	126	8	–	1	22	–	14	3¼	3	22	1	10	3¼
24	38	8	–	80	128	–	–	1	23	–	14	6¾	3	23	1	10	6¾
25	40	–	–	81	129	12	–	1	24	–	14	10¼	3	24	1	10	10¼
26	41	12	–	82	131	4	–	1	25	–	15	1½	3	25	1	11	1½
27	43	4	–	83	132	16	–	1	26	–	15	5	3	26	1	11	5
28	44	16	–	84	134	8	–	1	27	–	15	8½	3	27	1	11	8½
29	46	8	–	85	136	–	–	2	—	–	16	–					
30	48	–	–	86	137	12	–	2	1	–	16	3¼	0	1	–	–	3¼
31	49	12	–	87	139	4	–	2	2	–	16	6¾	0	2	–	–	6¾
32	51	4	–	88	140	16	–	2	3	–	16	10¼	0	3	–	–	10¼
33	52	16	–	89	142	8	–	2	4	–	17	1½	0	4	–	1	1½
34	54	8	–	90	144	–	–	2	5	–	17	5	0	5	–	1	5
35	56	–	–	91	145	12	–	2	6	–	17	8½	0	6	–	1	8½
36	57	12	–	92	147	4	–	2	7	–	18	–	0	7	–	2	–
37	59	4	–	93	148	16	–	2	8	–	18	3¼	0	8	–	2	3¼
38	60	16	–	94	150	8	–	2	9	–	18	6¾	0	9	–	2	6¾
39	62	8	–	95	152	–	–	2	10	–	18	10¼	0	10	–	2	10¼
40	64	–	–	96	153	12	–	2	11	–	19	1½	0	11	–	3	1½
41	65	12	–	97	155	4	–	2	12	–	19	5	0	12	–	3	5
42	67	4	–	98	156	16	–	2	13	–	19	8½	0	13	–	3	8½
43	68	16	–	99	158	8	–	2	14	1	–	–	0	14	–	4	–
44	70	8	–	100	160	–	–	2	15	1	–	3¼	0	15	–	4	3¼
45	72	–	–	200	320	–	–	2	16	1	–	6¾	0	16	–	4	6¾
46	73	12	–	300	480	–	–	2	17	1	–	10¼	0	17	–	4	10¼
47	75	4	–	400	640	–	–	2	18	1	1	1½	0	18	–	5	1½
48	76	16	–	500	800	–	–	2	19	1	1	5	0	19	–	5	5
49	78	8	–	600	960	–	–	2	20	1	1	8½	0	20	–	5	8½
50	80	–	–	700	1120	–	–	2	21	1	2	–	0	21	–	6	–
51	81	12	–	800	1280	–	–	2	22	1	2	3¼	0	22	–	6	3¼
52	83	4	–	900	1440	–	–	2	23	1	2	6¾	0	23	–	6	6¾
53	84	16	–	1000	1600	–	–	2	24	1	2	10¼	0	24	–	6	10¼
54	86	8	–	2000	3200	–	–	2	25	1	3	1½	0	25	–	7	1½
55	88	–	–	3000	4800	–	–	2	26	1	3	5	0	26	–	7	5
56	89	12	–	4000	6400	–	–	2	27	1	3	8½	0	27	–	7	8½

32s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	12	6	57	92	12	6	1	–	–	8	1½	3	–	1	4	4½
2	3	5	–	58	94	5	–	1	1	–	8	4¾	3	1	1	4	7¾
3	4	17	6	59	95	17	6	1	2	–	8	8¼	3	2	1	4	11¼
4	6	10	–	60	97	10	–	1	3	–	8	11¾	3	3	1	5	2¾
5	8	2	6	61	99	2	6	1	4	–	9	3¼	3	4	1	5	6¼
6	9	15	–	62	100	15	–	1	5	–	9	6¾	3	5	1	5	9¾
7	11	7	6	63	102	7	6	1	6	–	9	10¼	3	6	1	6	1¼
8	13	–	–	64	104	–	–	1	7	–	10	1¾	3	7	1	6	4¾
9	14	12	6	65	105	12	6	1	8	–	10	5¼	3	8	1	6	8¼
10	16	5	–	66	107	5	–	1	9	–	10	8¾	3	9	1	6	11¾
11	17	17	6	67	108	17	6	1	10	–	11	–¼	3	10	1	7	3¼
12	19	10	–	68	110	10	–	1	11	–	11	3¾	3	11	1	7	6¾
13	21	2	6	69	112	2	6	1	12	–	11	7¼	3	12	1	7	10¼
14	22	15	–	70	113	15	–	1	13	–	11	10¾	3	13	1	8	1¾
15	24	7	6	71	115	7	6	1	14	–	12	2¼	3	14	1	8	5¼
16	26	–	–	72	117	–	–	1	15	–	12	5½	3	15	1	8	8½
17	27	12	6	73	118	12	6	1	16	–	12	9	3	16	1	9	–
18	29	5	–	74	120	5	–	1	17	–	13	–½	3	17	1	9	3½
19	30	17	6	75	121	17	6	1	18	–	13	4	3	18	1	9	7
20	32	10	–	76	123	10	–	1	19	–	13	7½	3	19	1	9	10½
21	34	2	6	77	125	2	6	1	20	–	13	11	3	20	1	10	2
22	35	15	–	78	126	15	–	1	21	–	14	2½	3	21	1	10	5½
23	37	7	6	79	128	7	6	1	22	–	14	6	3	22	1	10	9
24	39	–	–	80	130	–	–	1	23	–	14	9½	3	23	1	11	–½
25	40	12	6	81	131	12	6	1	24	–	15	1	3	24	1	11	4
26	42	5	–	82	133	5	–	1	25	–	15	4½	3	25	1	11	7½
27	43	17	6	83	134	17	6	1	26	–	15	8	3	26	1	11	11
28	45	10	–	84	136	10	–	1	27	–	15	11½	3	27	1	12	2½
29	47	2	6	85	138	2	6	2	—	–	16	3					
30	48	15	–	86	139	15	–	2	1	–	16	6¼	0	1	–	–	3¼
31	50	7	6	87	141	7	6	2	2	–	16	9¾	0	2	–	–	6¾
32	52	–	–	88	143	–	–	2	3	–	17	1¼	0	3	–	–	10¼
33	53	12	6	89	144	12	6	2	4	–	17	4¾	0	4	–	1	1¾
34	55	5	–	90	146	5	–	2	5	–	17	8¼	0	5	–	1	5¼
35	56	17	6	91	147	17	6	2	6	–	17	11¾	0	6	–	1	8¾
36	58	10	–	92	149	10	–	2	7	–	18	3¼	0	7	–	2	–¼
37	60	2	6	93	151	2	6	2	8	–	18	6¾	0	8	–	2	3¾
38	61	15	–	94	152	15	–	2	9	–	18	10¼	0	9	–	2	7¼
39	63	7	6	95	154	7	6	2	10	–	19	1¾	0	10	–	2	10¾
40	65	–	–	96	156	–	–	2	11	–	19	5¼	0	11	–	3	2¼
41	66	12	6	97	157	12	6	2	12	–	19	8¾	0	12	–	3	5¾
42	68	5	–	98	159	5	–	2	13	1	–	–¼	0	13	–	3	9¼
43	69	17	6	99	160	17	6	2	14	1	–	3¾	0	14	–	4	–¾
44	71	10	–	100	162	10	–	2	15	1	–	7	0	15	–	4	4
45	73	2	6	200	325	–	–	2	16	1	–	10½	0	16	–	4	7½
46	74	15	–	300	487	10	–	2	17	1	1	2	0	17	–	4	11
47	76	7	6	400	650	–	–	2	18	1	1	5½	0	18	–	5	2½
48	78	–	–	500	812	10	–	2	19	1	1	9	0	19	–	5	6
49	79	12	6	600	975	–	–	2	20	1	2	–½	0	20	–	5	9½
50	81	5	–	700	1137	10	–	2	21	1	2	4	0	21	–	6	1
51	82	17	6	800	1300	–	–	2	22	1	2	7½	0	22	–	6	4½
52	84	10	–	900	1462	10	–	2	23	1	2	11	0	23	–	6	8
53	86	2	6	1000	1625	–	–	2	24	1	3	2½	0	24	–	6	11½
54	87	15	–	2000	3250	–	–	2	25	1	3	6	0	25	–	7	3
55	89	7	6	3000	4875	–	–	2	26	1	3	9½	0	26	–	7	6½
56	91	–	–	4000	6500	–	–	2	27	1	4	1	0	27	–	7	10

32s. 8d. per Cwt. 3½d. per lb. £32. 13s. 4d. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	12	8	57	93	2	–	1	–	–	8	2	3	–	1	4	6
2	3	5	4	58	94	14	8	1	1	–	8	5½	3	1	1	4	9½
3	4	18	–	59	96	7	4	1	2	–	8	9	3	2	1	5	1
4	6	10	8	60	98	–	–	1	3	–	9	–½	3	3	1	5	4½
5	8	3	4	61	99	12	8	1	4	–	9	4	3	4	1	5	8
6	9	16	–	62	101	5	4	1	5	–	9	7½	3	5	1	5	11½
7	11	8	8	63	102	18	–	1	6	–	9	11	3	6	1	6	3
8	13	1	4	64	104	10	8	1	7	–	10	2½	3	7	1	6	6½
9	14	14	–	65	106	3	4	1	8	–	10	6	3	8	1	6	10
10	16	6	8	66	107	16	–	1	9	–	10	9½	3	9	1	7	1½
11	17	19	4	67	109	8	8	1	10	–	11	1	3	10	1	7	5
12	19	12	–	68	111	1	4	1	11	–	11	4½	3	11	1	7	8½
13	21	4	8	69	112	14	–	1	12	–	11	8	3	12	1	8	–
14	22	17	4	70	114	6	8	1	13	–	11	11½	3	13	1	8	3½
15	24	10	–	71	115	19	4	1	14	–	12	3	3	14	1	8	7
16	26	2	8	72	117	12	–	1	15	–	12	6½	3	15	1	8	10½
17	27	15	4	73	119	4	8	1	16	–	12	10	3	16	1	9	2
18	29	8	–	74	120	17	4	1	17	–	13	1½	3	17	1	9	5½
19	31	–	8	75	122	10	–	1	18	–	13	5	3	18	1	9	9
20	32	13	4	76	124	2	8	1	19	–	13	8½	3	19	1	10	–½
21	34	6	–	77	125	15	4	1	20	–	14	–	3	20	1	10	4
22	35	18	8	78	127	8	–	1	21	–	14	3½	3	21	1	10	7½
23	37	11	4	79	129	–	8	1	22	–	14	7	3	22	1	10	11
24	39	4	–	80	130	13	4	1	23	–	14	10½	3	23	1	11	2½
25	40	16	8	81	132	6	–	1	24	–	15	2	3	24	1	11	6
26	42	9	4	82	133	18	8	1	25	–	15	5½	3	25	1	11	9½
27	44	2	–	83	135	11	4	1	26	–	15	9	3	26	1	12	1
28	45	14	8	84	137	4	–	1	27	–	16	–½	3	27	1	12	4½
29	47	7	4	85	138	16	8	2	—	–	16	4					
30	49	–	–	86	140	9	4	2	1	–	16	7½	0	1	–	–	3½
31	50	12	8	87	142	2	–	2	2	–	16	11	0	2	–	–	7
32	52	5	4	88	143	14	8	2	3	–	17	2½	0	3	–	–	10½
33	53	18	–	89	145	7	4	2	4	–	17	6	0	4	–	1	2
34	55	10	8	90	147	–	–	2	5	–	17	9½	0	5	–	1	5½
35	57	3	4	91	148	12	8	2	6	–	18	1	0	6	–	1	9
36	58	16	–	92	150	5	4	2	7	–	18	4½	0	7	–	2	–½
37	60	8	8	93	151	18	–	2	8	–	18	8	0	8	–	2	4
38	62	1	4	94	153	10	8	2	9	–	18	11½	0	9	–	2	7½
39	63	14	–	95	155	3	4	2	10	–	19	3	0	10	–	2	11
40	65	6	8	96	156	16	–	2	11	–	19	6½	0	11	–	3	2½
41	66	19	4	97	158	8	8	2	12	–	19	10	0	12	–	3	6
42	68	12	–	98	160	1	4	2	13	1	–	1½	0	13	–	3	9½
43	70	4	8	99	161	14	–	2	14	1	–	5	0	14	–	4	1
44	71	17	4	100	163	6	8	2	15	1	–	8½	0	15	–	4	4½
45	73	10	–	200	326	13	4	2	16	1	1	–	0	16	–	4	8
46	75	2	8	300	490	–	–	2	17	1	1	3½	0	17	–	4	11½
47	76	15	4	400	653	6	8	2	18	1	1	7	0	18	–	5	3
48	78	8	–	500	816	13	4	2	19	1	1	10½	0	19	–	5	6½
49	80	–	8	600	980	–	–	2	20	1	2	2	0	20	–	5	10
50	81	13	4	700	1143	6	8	2	21	1	2	5½	0	21	–	6	1½
51	83	6	–	800	1306	13	4	2	22	1	2	9	0	22	–	6	5
52	84	18	8	900	1470	–	–	2	23	1	3	–½	0	23	–	6	8½
53	86	11	4	1000	1633	6	8	2	24	1	3	4	0	24	–	7	–
54	88	4	–	2000	3266	13	4	2	25	1	3	7½	0	25	–	7	3½
55	89	16	8	3000	4900	–	–	2	26	1	3	11	0	26	–	7	7
56	91	9	4	4000	6533	6	8	2	27	1	4	2½	0	27	–	7	10½

£33. per Ton. 33s. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	13	-	57	94	1	-	1	-	-	8	3	3	-	1	4	9
2	3	6	-	58	95	14	-	1	1	-	8	6½	3	1	1	5	-½
3	4	19	-	59	97	7	-	1	2	-	8	10	3	2	1	5	4
4	6	12	-	60	99	-	-	1	3	-	9	1½	3	3	1	5	7½
5	8	5	-	61	100	18	-	1	4	-	9	5	3	4	1	5	11
6	9	18	-	62	102	6	-	1	5	-	9	8½	3	5	1	6	2½
7	11	11	-	63	103	19	-	1	6	-	10	-	3	6	1	6	6
8	13	4	-	64	105	12	-	1	7	-	10	3¾	3	7	1	6	9¾
9	14	17	-	65	107	5	-	1	8	-	10	7¼	3	8	1	7	1¼
10	16	10	-	66	108	18	-	1	9	-	10	10¾	3	9	1	7	4¾
11	18	3	-	67	110	11	-	1	10	-	11	2¼	3	10	1	7	8¼
12	19	16	-	68	112	4	-	1	11	-	11	5¾	3	11	1	7	11¾
13	21	9	-	69	113	17	-	1	12	-	11	9¼	3	12	1	8	3¼
14	23	2	-	70	115	10	-	1	13	-	12	-¾	3	13	1	8	6¾
15	24	15	-	71	117	3	-	1	14	-	12	4½	3	14	1	8	10½
16	26	8	-	72	118	16	-	1	15	-	12	8	3	15	1	9	2
17	28	1	-	73	120	9	-	1	16	-	12	11½	3	16	1	9	5½
18	29	14	-	74	122	2	-	1	17	-	13	3	3	17	1	9	9
19	31	7	-	75	123	15	-	1	18	-	13	6½	3	18	1	10	-½
20	33	-	-	76	125	8	-	1	19	-	13	10	3	19	1	10	4
21	34	13	-	77	127	1	-	1	20	-	14	1½	3	20	1	10	7½
22	36	6	-	78	128	14	-	1	21	-	14	5¼	3	21	1	10	11¼
23	37	19	-	79	130	7	-	1	22	-	14	8¾	3	22	1	11	2¾
24	39	12	-	80	132	-	-	1	23	-	15	-¼	3	23	1	11	6¼
25	41	5	-	81	133	13	-	1	24	-	15	3¾	3	24	1	11	9¾
26	42	18	-	82	135	6	-	1	25	-	15	7¼	3	25	1	12	1¼
27	44	11	-	83	136	19	-	1	26	-	15	10¾	3	26	1	12	4¾
28	46	4	-	84	138	12	-	1	27	-	16	2¼	3	27	1	12	8¼
29	47	17	-	85	140	5	-	2	—	-	16	6					
30	49	10	-	86	141	18	-	2	1	-	16	9½	0	1	-	-	3½
31	51	3	-	87	143	11	-	2	2	-	17	1	0	2	-	-	7
32	52	16	-	88	145	4	-	2	3	-	17	4½	0	3	-	-	10½
33	54	9	-	89	146	17	-	2	4	-	17	8	0	4	-	1	2
34	56	2	-	90	148	10	-	2	5	-	17	11½	0	5	-	1	5½
35	57	15	-	91	150	3	-	2	6	-	18	3	0	6	-	1	9
36	59	8	-	92	151	16	-	2	7	-	18	6¾	0	7	-	2	-¾
37	61	1	-	93	153	9	-	2	8	-	18	10¼	0	8	-	2	4¼
38	62	14	-	94	155	2	-	2	9	-	19	1¾	0	9	-	2	7¾
39	64	7	-	95	156	15	-	2	10	-	19	5¼	0	10	-	2	11¼
40	66	-	-	96	158	8	-	2	11	-	19	8¾	0	11	-	3	2¾
41	67	13	-	97	160	1	-	2	12	1	-	-¼	0	12	-	3	6¼
42	69	6	-	98	161	14	-	2	13	1	-	3¾	0	13	-	3	9¾
43	70	19	-	99	163	7	-	2	14	1	-	7½	0	14	-	4	1½
44	72	12	-	100	165	-	-	2	15	1	-	11	0	15	-	4	5
45	74	5	-	200	330	-	-	2	16	1	1	2½	0	16	-	4	8½
46	75	18	-	300	495	-	-	2	17	1	1	6	0	17	-	5	-
47	77	11	-	400	660	-	-	2	18	1	1	9½	0	18	-	5	3½
48	79	4	-	500	825	-	-	2	19	1	2	1	0	19	-	5	7
49	80	17	-	600	990	-	-	2	20	1	2	4½	0	20	-	5	10½
50	82	10	-	700	1155	-	-	2	21	1	2	8¼	0	21	-	6	2¼
51	84	3	-	800	1320	-	-	2	22	1	2	11¾	0	22	-	6	5¾
52	85	16	-	900	1485	-	-	2	23	1	3	3¼	0	23	-	6	9¼
53	87	9	-	1000	1650	-	-	2	24	1	3	6¾	0	24	-	7	-¾
54	89	2	-	2000	3300	-	-	2	25	1	3	10¼	0	25	-	7	4¼
55	90	15	-	3000	4950	-	-	2	26	1	4	1¾	0	26	-	7	7¾
56	92	8	-	4000	6600	-	-	2	27	1	4	5¼	0	27	-	7	11¼

33*s*. 6*d*. *per Cwt*.

£33. 10*s*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	13	6	57	95	9	6	1	–	–	8	4½	3	–	1	5	1½
2	3	7	–	58	97	3	–	1	1	–	8	8	3	1	1	5	5
3	5	–	6	59	98	16	6	1	2	–	8	11½	3	2	1	5	8½
4	6	14	–	60	100	10	–	1	3	–	9	3¼	3	3	1	6	–¼
5	8	7	6	61	102	3	6	1	4	–	9	6¾	3	4	1	6	3¾
6	10	1	–	62	103	17	–	1	5	–	9	10¼	3	5	1	6	7¼
7	11	14	6	63	105	10	6	1	6	–	10	2	3	6	1	6	11
8	13	8	–	64	107	4	–	1	7	–	10	5½	3	7	1	7	2½
9	15	1	6	65	108	17	6	1	8	–	10	9	3	8	1	7	6
10	16	15	–	66	110	11	–	1	9	–	11	–¾	3	9	1	7	9¾
11	18	8	6	67	112	4	6	1	10	–	11	4¼	3	10	1	8	1¼
12	20	2	–	68	113	18	–	1	11	–	11	7¾	3	11	1	8	4¾
13	21	15	6	69	115	11	6	1	12	–	11	11½	3	12	1	8	8½
14	23	9	–	70	117	5	–	1	13	–	12	3	3	13	1	9	–
15	25	2	6	71	118	18	6	1	14	–	12	6¾	3	14	1	9	3¾
16	26	16	–	72	120	12	–	1	15	–	12	10¼	3	15	1	9	7¼
17	28	9	6	73	122	5	6	1	16	–	13	1¾	3	16	1	9	10¾
18	30	3	–	74	123	19	–	1	17	–	13	5½	3	17	1	10	2½
19	31	16	6	75	125	12	6	1	18	–	13	9	3	18	1	10	6
20	33	10	–	76	127	6	–	1	19	–	14	–½	3	19	1	10	9½
21	35	3	6	77	128	19	6	1	20	–	14	4¼	3	20	1	11	1¼
22	36	17	–	78	130	13	–	1	21	–	14	7¾	3	21	1	11	4¾
23	38	10	6	79	132	6	6	1	22	–	14	11¼	3	22	1	11	8¼
24	40	4	–	80	134	–	–	1	23	–	15	3	3	23	1	12	–
25	41	17	6	81	135	13	6	1	24	–	15	6½	3	24	1	12	3½
26	43	11	–	82	137	7	–	1	25	–	15	10	3	25	1	12	7
27	45	4	6	83	139	–	6	1	26	–	16	1¾	3	26	1	12	10¾
28	46	18	–	84	140	14	–	1	27	–	16	5¼	3	27	1	13	2¼
29	48	11	6	85	142	7	6	2	—	–	16	9					
30	50	5	–	86	144	1	–	2	1	–	17	–½	0	1	–	–	3½
31	51	18	6	87	145	14	6	2	2	–	17	4	0	2	–	–	7
32	53	12	–	88	147	8	–	2	3	–	17	7¾	0	3	–	–	10¾
33	55	5	6	89	149	1	6	2	4	–	17	11¼	0	4	–	1	2¼
34	56	19	–	90	150	15	–	2	5	–	18	2¾	0	5	–	1	5¾
35	58	12	6	91	152	8	6	2	6	–	18	6½	0	6	–	1	9½
36	60	6	–	92	154	2	–	2	7	–	18	10	0	7	–	2	1
37	61	19	6	93	155	15	6	2	8	–	19	1½	0	8	–	2	4½
38	63	13	–	94	157	9	–	2	9	–	19	5¼	0	9	–	2	8¼
39	65	6	6	95	159	2	6	2	10	–	19	8¾	0	10	–	2	11¾
40	67	–	–	96	160	16	–	2	11	1	–	–¼	0	11	–	3	3¼
41	68	13	6	97	162	9	6	2	12	1	–	4	0	12	–	3	7
42	70	7	–	98	164	3	–	2	13	1	–	7½	0	13	–	3	10½
43	72	–	6	99	165	16	6	2	14	1	–	11¼	0	14	–	4	2¼
44	73	14	–	100	167	10	–	2	15	1	1	2¾	0	15	–	4	5¾
45	75	7	6	200	335	–	–	2	16	1	1	6¼	0	16	–	4	9¼
46	77	1	–	300	502	10	–	2	17	1	1	10	0	17	–	5	1
47	78	14	6	400	670	–	–	2	18	1	2	1½	0	18	–	5	4½
48	80	8	–	500	837	10	–	2	19	1	2	5	0	19	–	5	8
49	82	1	6	600	1005	–	–	2	20	1	2	8¾	0	20	–	5	11¾
50	83	15	–	700	1172	10	–	2	21	1	3	–¼	0	21	–	6	3¼
51	85	8	6	800	1340	–	–	2	22	1	3	3¾	0	22	–	6	6¾
52	87	2	–	900	1507	10	–	2	23	1	3	7½	0	23	–	6	10½
53	88	15	6	1000	1675	–	–	2	24	1	3	11	0	24	–	7	2
54	90	9	–	2000	3350	–	–	2	25	1	4	2½	0	25	–	7	5½
55	92	2	6	3000	5025	–	–	2	26	1	4	6¼	0	26	–	7	9¼
	93	16	–	4000	6700	–	–	2	27	1	4	9¾	0	27	–	8	–¾

£34. per Ton. 34*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	14	–	57	96	18	–	1	–	–	8	6	3	–	1	5	6
2	3	8	–	58	98	12	–	1	1	–	8	9½	3	1	1	5	9½
3	5	2	–	59	100	6	–	1	2	–	9	1¼	3	2	1	6	1¼
4	6	16	–	60	102	–	–	1	3	–	9	4¾	3	3	1	6	4¾
5	8	10	–	61	103	14	–	1	4	–	9	8½	3	4	1	6	8½
6	10	4	–	62	105	8	–	1	5	–	10	–	3	5	1	7	–
7	11	18	–	63	107	2	–	1	6	–	10	3¾	3	6	1	7	3¾
8	13	12	–	64	108	16	–	1	7	–	10	7½	3	7	1	7	7½
9	15	6	–	65	110	10	–	1	8	–	10	11	3	8	1	7	11
10	17	–	–	66	112	4	–	1	9	–	11	2¾	3	9	1	8	2¾
11	18	14	–	67	113	18	–	1	10	–	11	6¼	3	10	1	8	6¼
12	20	8	–	68	115	12	–	1	11	–	11	10	3	11	1	8	10
13	22	2	–	69	117	6	–	1	12	–	12	1½	3	12	1	9	1½
14	23	16	–	70	119	–	–	1	13	–	12	5¼	3	13	1	9	5¼
15	25	10	–	71	120	14	–	1	14	–	12	9	3	14	1	9	9
16	27	4	–	72	122	8	–	1	15	–	13	–½	3	15	1	10	–½
17	28	18	–	73	124	2	–	1	16	–	13	4¼	3	16	1	10	4¼
18	30	12	–	74	125	16	–	1	17	–	13	7¾	3	17	1	10	7¾
19	32	6	–	75	127	10	–	1	18	–	13	11½	3	18	1	10	11½
20	34	–	–	76	129	4	–	1	19	–	14	3	3	19	1	11	3
21	35	14	–	77	130	18	–	1	20	–	14	6¾	3	20	1	11	6¾
22	37	8	–	78	132	12	–	1	21	–	14	10½	3	21	1	11	10½
23	39	2	–	79	134	6	–	1	22	–	15	2	3	22	1	12	2
24	40	16	–	80	136	–	–	1	23	–	15	5¾	3	23	1	12	5¾
25	42	10	–	81	137	14	–	1	24	–	15	9¼	3	24	1	12	9¼
26	44	4	–	82	139	8	–	1	25	–	16	1	3	25	1	13	1
27	45	18	–	83	141	2	–	1	26	–	16	4½	3	26	1	13	4½
28	47	12	–	84	142	16	–	1	27	–	16	8¼	3	27	1	13	8¼
29	49	6	–	85	144	10	–	2	—	–	17	–					
30	51	–	–	86	146	4	–	2	1	–	17	3½	0	1	–	–	3½
31	52	14	–	87	147	18	–	2	2	–	17	7¼	0	2	–	–	7¼
32	54	8	–	88	149	12	–	2	3	–	17	10¾	0	3	–	–	10¾
33	56	2	–	89	151	6	–	2	4	–	18	2½	0	4	–	1	2½
34	57	16	–	90	153	–	–	2	5	–	18	6	0	5	–	1	6
35	59	10	–	91	154	14	–	2	6	–	18	9¾	0	6	–	1	9¾
36	61	4	–	92	156	8	–	2	7	–	19	1½	0	7	–	2	1½
37	62	18	–	93	158	2	–	2	8	–	19	5	0	8	–	2	5
38	64	12	–	94	159	16	–	2	9	–	19	8¾	0	9	–	2	8¾
39	66	6	–	95	161	10	–	2	10	1	–	–¼	0	10	–	3	–¼
40	68	–	–	96	163	4	–	2	11	1	–	4	0	11	–	3	4
41	69	14	–	97	164	18	–	2	12	1	–	7½	0	12	–	3	7½
42	71	8	–	98	166	12	–	2	13	1	–	11¼	0	13	–	3	11¼
43	73	2	–	99	168	6	–	2	14	1	1	3	0	14	–	4	3
44	74	16	–	100	170	–	–	2	15	1	1	6½	0	15	–	4	6½
45	76	10	–	200	340	–	–	2	16	1	1	10¼	0	16	–	4	10¼
46	78	4	–	300	510	–	–	2	17	1	2	1¾	0	17	–	5	1¾
47	79	18	–	400	680	–	–	2	18	1	2	5½	0	18	–	5	5½
48	81	12	–	500	850	–	–	2	19	1	2	9	0	19	–	5	9
49	83	6	–	600	1020	–	–	2	20	1	3	–¾	0	20	–	6	–¾
50	85	–	–	700	1190	–	–	2	21	1	3	4½	0	21	–	6	4½
51	86	14	–	800	1360	–	–	2	22	1	3	8	0	22	–	6	8
52	88	8	–	900	1530	–	–	2	23	1	3	11¾	0	23	–	6	11¾
53	90	2	–	1000	1700	–	–	2	24	1	4	3¼	0	24	–	7	3¼
54	91	16	–	2000	3400	–	–	2	25	1	4	7	0	25	–	7	7
55	93	10	–	3000	5100	–	–	2	26	1	4	10½	0	26	–	7	10½
56	95	4	–	4000	6800	–	–	2	27	1	5	2¼	0	27	–	8	2¼

34s. 6d. per Cwt. £34. 10s. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	14	6	57	98	6	6	1	–	–	8	7½	3	–	1	5	10½
2	3	9	–	58	100	1	–	1	1	–	8	11	3	1	1	6	2
3	5	3	6	59	101	15	6	1	2	–	9	2¾	3	2	1	6	5¾
4	6	18	–	60	103	10	–	1	3	–	9	6½	3	3	1	6	9½
5	8	12	6	61	105	4	6	1	4	–	9	10¼	3	4	1	7	1¼
6	10	7	–	62	106	19	–	1	5	–	10	1¾	3	5	1	7	4¾
7	12	1	6	63	108	13	6	1	6	–	10	5½	3	6	1	7	8½
8	13	16	–	64	110	8	–	1	7	–	10	9¼	3	7	1	8	–¼
9	15	10	6	65	112	2	6	1	8	–	11	1	3	8	1	8	4
10	17	5	–	66	113	17	–	1	9	–	11	4¾	3	9	1	8	7¾
11	18	19	6	67	115	11	6	1	10	–	11	8¼	3	10	1	8	11¼
12	20	14	–	68	117	6	–	1	11	–	12	–	3	11	1	9	3
13	22	8	6	69	119	–	6	1	12	–	12	3¾	3	12	1	9	6¾
14	24	3	–	70	120	15	–	1	13	–	12	7½	3	13	1	9	10½
15	25	17	6	71	122	9	6	1	14	–	12	11¼	3	14	1	10	2¼
16	27	12	–	72	124	4	–	1	15	–	13	2¾	3	15	1	10	5¾
17	29	6	6	73	125	18	6	1	16	–	13	6½	3	16	1	10	9½
18	31	1	–	74	127	13	–	1	17	–	13	10¼	3	17	1	11	1¼
19	32	15	6	75	129	7	6	1	18	–	14	2	3	18	1	11	5
20	34	10	–	76	131	2	–	1	19	–	14	5½	3	19	1	11	8½
21	36	4	6	77	132	16	6	1	20	–	14	9¼	3	20	1	12	–¼
22	37	19	–	78	134	11	–	1	21	–	15	1	3	21	1	12	4
23	39	13	6	79	136	5	6	1	22	–	15	4¾	3	22	1	12	7¾
24	41	8	–	80	138	–	–	1	23	–	15	8½	3	23	1	12	11½
25	43	2	6	81	139	14	6	1	24	–	16	–	3	24	1	13	3
26	44	17	–	82	141	9	–	1	25	–	16	3¾	3	25	1	13	6¾
27	46	11	6	83	143	3	6	1	26	–	16	7½	3	26	1	13	10½
28	48	6	–	84	144	18	–	1	27	–	16	11¼	3	27	1	14	2¼
29	50	–	6	85	146	12	6	2	—	–	17	3					
30	51	15	–	86	148	7	–	2	1	–	17	6½	0	1	–	–	3½
31	53	9	6	87	150	1	6	2	2	–	17	10¼	0	2	–	–	7¼
32	55	4	–	88	151	16	–	2	3	–	18	2	0	3	–	–	11
33	56	18	6	89	153	10	6	2	4	–	18	5¾	0	4	–	1	2¾
34	58	13	–	90	155	5	–	2	5	–	18	9¼	0	5	–	1	6¼
35	60	7	6	91	156	19	6	2	6	–	19	1	0	6	–	1	10
36	62	2	–	92	158	14	–	2	7	–	19	4¾	0	7	–	2	1¾
37	63	16	6	93	160	8	6	2	8	–	19	8½	0	8	–	2	5½
38	65	11	–	94	162	3	–	2	9	1	–	–¼	0	9	–	2	9¼
39	67	5	6	95	163	17	6	2	10	1	–	3¾	0	10	–	3	–¾
40	69	–	–	96	165	12	–	2	11	1	–	7½	0	11	–	3	4½
41	70	14	6	97	167	6	6	2	12	1	–	11¼	0	12	–	3	8¼
42	72	9	–	98	169	1	–	2	13	1	1	3	0	13	–	4	–
43	74	3	6	99	170	15	6	2	14	1	1	6¾	0	14	–	4	3¾
44	75	18	–	100	172	10	–	2	15	1	1	10¼	0	15	–	4	7¼
45	77	12	6	200	345	–	–	2	16	1	2	2	0	16	–	4	11
46	79	7	–	300	517	10	–	2	17	1	2	5¾	0	17	–	5	2¾
47	81	1	6	400	690	–	–	2	18	1	2	9½	0	18	–	5	6½
48	82	16	–	500	862	10	–	2	19	1	3	1	0	19	–	5	10
49	84	10	6	600	1035	–	–	2	20	1	3	4¾	0	20	–	6	1¾
50	86	5	–	700	1207	10	–	2	21	1	3	8½	0	21	–	6	5½
51	87	19	6	800	1380	–	–	2	22	1	4	–¼	0	22	–	6	9¼
52	89	14	–	900	1552	10	–	2	23	1	4	4	0	23	–	7	1
53	91	8	6	1000	1725	–	–	2	24	1	4	7½	0	24	–	7	4½
54	93	3	–	2000	3450	–	–	2	25	1	4	11¼	0	25	–	7	8¼
55	94	17	6	3000	5175	–	–	2	26	1	5	3	0	26	–	8	–
56	96	12	–	4000	6900	–	–	2	27	1	5	6¾	0	27	–	8	3¾

£35. per Ton. 3¾*d. per lb.* 35*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	15	–	57	99	15	–	1	–	–	8	9	3	–	1	6	3
2	3	10	–	58	101	10	–	1	1	–	9	–¾	3	1	1	6	6¾
3	5	5	–	59	103	5	–	1	2	–	9	4½	3	2	1	6	10½
4	7	–	–	60	105	–	–	1	3	–	9	8¼	3	3	1	7	2¼
5	8	15	–	61	106	15	–	1	4	–	10	–	3	4	1	7	6
6	10	10	–	62	108	10	–	1	5	–	10	3¾	3	5	1	7	9¾
7	12	5	–	63	110	5	–	1	6	–	10	7½	3	6	1	8	1½
8	14	–	–	64	112	–	–	1	7	–	10	11¼	3	7	1	8	5¼
9	15	15	–	65	113	15	–	1	8	–	11	3	3	8	1	8	9
10	17	10	–	66	115	10	–	1	9	–	11	6¾	3	9	1	9	–¾
11	19	5	–	67	117	5	–	1	10	–	11	10½	3	10	1	9	4½
12	21	–	–	68	119	–	–	1	11	–	12	2¼	3	11	1	9	8¼
13	22	15	–	69	120	15	–	1	12	–	12	6	3	12	1	10	–
14	24	10	–	70	122	10	–	1	13	–	12	9¾	3	13	1	10	3¾
15	26	5	–	71	124	5	–	1	14	–	13	1½	3	14	1	10	7½
16	28	–	–	72	126	–	–	1	15	–	13	5¼	3	15	1	10	11¼
17	29	15	–	73	127	15	–	1	16	–	13	9	3	16	1	11	3
18	31	10	–	74	129	10	–	1	17	–	14	–¾	3	17	1	11	6¾
19	33	5	–	75	131	5	–	1	18	–	14	4½	3	18	1	11	10½
20	35	–	–	76	133	–	–	1	19	–	14	8¼	3	19	1	12	2¼
21	36	15	–	77	134	15	–	1	20	–	15	–	3	20	1	12	6
22	38	10	–	78	136	10	–	1	21	–	15	3¾	3	21	1	12	9¾
23	40	5	–	79	138	5	–	1	22	–	15	7½	3	22	1	13	1½
24	42	–	–	80	140	–	–	1	23	–	15	11¼	3	23	1	13	5¼
25	43	15	–	81	141	15	–	1	24	–	16	3	3	24	1	13	9
26	45	10	–	82	143	10	–	1	25	–	16	6¾	3	25	1	14	–¾
27	47	5	–	83	145	5	–	1	26	–	16	10½	3	26	1	14	4½
28	49	–	–	84	147	–	–	1	27	–	17	2¼	3	27	1	14	8¼
29	50	15	–	85	148	15	–	2	—	–	17	6					
30	52	10	–	86	150	10	–	2	1	–	17	9¾	0	1	–	–	3¾
31	54	5	–	87	152	5	–	2	2	–	18	1½	0	2	–	–	7½
32	56	–	–	88	154	–	–	2	3	–	18	5¼	0	3	–	–	11¼
33	57	15	–	89	155	15	–	2	4	–	18	9	0	4	–	1	3
34	59	10	–	90	157	10	–	2	5	–	19	–¾	0	5	–	1	6¾
35	61	5	–	91	159	5	–	2	6	–	19	4½	0	6	–	1	10½
36	63	–	–	92	161	–	–	2	7	–	19	8¼	0	7	–	2	2¼
37	64	15	–	93	162	15	–	2	8	1	–	–	0	8	–	2	6
38	66	10	–	94	164	10	–	2	9	1	–	3¾	0	9	–	2	9¾
39	68	5	–	95	166	5	–	2	10	1	–	7½	0	10	–	3	1½
40	70	–	–	96	168	–	–	2	11	1	–	11¼	0	11	–	3	5¼
41	71	15	–	97	169	15	–	2	12	1	1	3	0	12	–	3	9
42	73	10	–	98	171	10	–	2	13	1	1	6¾	0	13	–	4	–¾
43	75	5	–	99	173	–	–	2	14	1	1	10½	0	14	–	4	4½
44	77	–	–	100	175	–	–	2	15	1	2	2¼	0	15	–	4	8¼
45	78	15	–	200	350	–	–	2	16	1	2	6	0	16	–	5	–
46	80	10	–	300	525	–	–	2	17	1	2	9¾	0	17	–	5	3¾
47	82	5	–	400	700	–	–	2	18	1	3	1½	0	18	–	5	7½
48	84	–	–	500	875	–	–	2	19	1	3	5¼	0	19	–	5	11¼
49	85	15	–	600	1050	–	–	2	20	1	3	9	0	20	–	6	3
50	87	10	–	700	1225	–	–	2	21	1	4	–¾	0	21	–	6	6¾
51	89	5	–	800	1400	–	–	2	22	1	4	4½	0	22	–	6	10½
52	91	–	–	900	1575	–	–	2	23	1	4	8¼	0	23	–	7	2¼
53	92	15	–	1000	1750	–	–	2	24	1	5	–	0	24	–	7	6
54	94	10	–	2000	3500	–	–	2	25	1	5	3¾	0	25	–	7	9¾
55	96	5	–	3000	5250	–	–	2	26	1	5	7½	0	26	–	8	1½
56	98	–	–	4000	7000	–	–	2	27	1	5	11¼	0	27	–	8	5¼

35*s.* 6*d. per Cwt.*

£35. 10*s. per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb	£.	s.	d.
1	1	15	6	57	101	3	6	1	–	–	8	10½	3	–	1	6	7½
2	3	11	–	58	102	19	–	1	1	–	9	2¼	3	1	1	6	11¼
3	5	6	6	59	104	14	6	1	2	–	9	6	3	2	1	7	3
4	7	2	–	60	106	10	–	1	3	–	9	9¾	3	3	1	7	6¾
5	8	17	6	61	108	5	6	1	4	–	10	1½	3	4	1	7	10½
6	10	13	–	62	110	1	–	1	5	–	10	5½	3	5	1	8	2½
7	12	8	6	63	111	16	6	1	6	–	10	9¼	3	6	1	8	6¼
8	14	4	–	64	113	12	–	1	7	–	11	1	3	7	1	8	10
9	15	19	6	65	115	7	6	1	8	–	11	4¾	3	8	1	9	1¾
10	17	15	–	66	117	3	–	1	9	–	11	8½	3	9	1	9	5½
11	19	10	6	67	118	18	6	1	10	–	12	–½	3	10	1	9	9½
12	21	6	–	68	120	14	–	1	11	–	12	4¼	3	11	1	10	1¼
13	23	1	6	69	122	9	6	1	12	–	12	8	3	12	1	10	5
14	24	17	–	70	124	5	–	1	13	–	12	11¾	3	13	1	10	8¾
15	26	12	6	71	126	–	6	1	14	–	13	3¾	3	14	1	11	–¾
16	28	8	–	72	127	16	–	1	15	–	13	7½	3	15	1	11	4½
17	30	3	6	73	129	11	6	1	16	–	13	11¼	3	16	1	11	8¼
18	31	19	–	74	131	7	–	1	17	–	14	3	3	17	1	12	–
19	33	14	6	75	133	2	6	1	18	–	14	6¾	3	18	1	12	3¾
20	35	10	–	76	134	18	–	1	19	–	14	10¾	3	19	1	12	7¾
21	37	5	6	77	136	13	6	1	20	–	15	2½	3	20	1	12	11½
22	39	1	–	78	138	9	–	1	21	–	15	6¼	3	21	1	13	3¼
23	40	16	6	79	140	4	6	1	22	–	15	10	3	22	1	13	7
24	42	12	–	80	142	–	–	1	23	–	16	1¾	3	23	1	13	10¾
25	44	7	6	81	143	15	6	1	24	–	16	5¾	3	24	1	14	2¾
26	46	3	–	82	145	11	–	1	25	–	16	9½	3	25	1	14	6½
27	47	18	6	83	147	6	6	1	26	–	17	1¼	3	26	1	14	10¼
28	49	14	–	84	149	2	–	1	27	–	17	5	3	27	1	15	2
29	51	9	6	85	150	17	6	2	—	–	17	9					
30	53	5	–	86	152	13	–	2	1	–	18	–¾	0	1	–	–	3¾
31	55	–	6	87	154	8	6	2	2	–	18	4½	0	2	–	–	7½
32	56	16	–	88	156	4	–	2	3	–	18	8¼	0	3	–	–	11¼
33	58	11	6	89	157	19	6	2	4	–	19	–	0	4	–	1	3
34	60	7	–	90	159	15	–	2	5	–	19	4	0	5	–	1	7
35	62	2	6	91	161	10	6	2	6	–	19	7¾	0	6	–	1	10¾
36	63	18	–	92	163	6	–	2	7	–	19	11½	0	7	–	2	2½
37	65	13	6	93	165	1	6	2	8	1	–	3¼	0	8	–	2	6¼
38	67	9	–	94	166	17	–	2	9	1	–	7	0	9	–	2	10
39	69	4	6	95	168	12	6	2	10	1	–	11	0	10	–	3	2
40	71	–	–	96	170	8	–	2	11	1	1	2¾	0	11	–	3	5¾
41	72	15	6	97	172	3	6	2	12	1	1	6½	0	12	–	3	9½
42	74	11	–	98	173	19	–	2	13	1	1	10¼	0	13	–	4	1¼
43	76	6	6	99	175	14	6	2	14	1	2	2¼	0	14	–	4	5¼
44	78	2	–	100	177	10	–	2	15	1	2	6	0	15	–	4	9
45	79	17	6	200	355	–	–	2	16	1	2	9¾	0	16	–	5	–¾
46	81	13	–	300	532	10	–	2	17	1	3	1½	0	17	–	5	4½
47	83	8	6	400	710	–	–	2	18	1	3	5¼	0	18	–	5	8¼
48	85	4	–	500	887	10	–	2	19	1	3	9¼	0	19	–	6	–¼
49	86	19	6	600	1065	–	–	2	20	1	4	1	0	20	–	6	4
50	88	15	–	700	1242	10	–	2	21	1	4	4¾	0	21	–	6	7¾
51	90	10	6	800	1420	–	–	2	22	1	4	8½	0	22	–	6	11½
52	92	6	–	900	1597	10	–	2	23	1	5	–¼	0	23	–	7	3¼
53	94	1	6	1000	1775	–	–	2	24	1	5	4¼	0	24	–	7	7¼
54	95	17	–	2000	3550	–	–	2	25	1	5	8	0	25	–	7	11
55	97	12	6	3000	5325	–	–	2	26	1	5	11¾	0	26	–	8	2¾
56	99	8	–	4000	7100	–	–	2	27	1	6	3½	0	27	–	8	6½

£36. per Ton.

36*s.* *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	16	–	57	102	12	–	1	–	–	9	–	3	–	1	7	–
2	3	12	–	58	104	8	–	1	1	–	9	3¾	3	1	1	7	3¾
3	5	8	–	59	106	4	–	1	2	–	9	7½	3	2	1	7	7½
4	7	4	–	60	108	–	–	1	3	–	9	11½	3	3	1	7	11½
5	9	–	–	61	109	16	–	1	4	–	10	3¼	3	4	1	8	3¼
6	10	16	–	62	111	12	–	1	5	–	10	7¼	3	5	1	8	7¼
7	12	12	–	63	113	8	–	1	6	–	10	11	3	6	1	8	11
8	14	8	–	64	115	4	–	1	7	–	11	3	3	7	1	9	3
9	16	4	–	65	117	–	–	1	8	–	11	6¾	3	8	1	9	6¾
10	18	–	–	66	118	16	–	1	9	–	11	10½	3	9	1	9	10½
11	19	16	–	67	120	12	–	1	10	–	12	2½	3	10	1	10	2½
12	21	12	–	68	122	8	–	1	11	–	12	6¼	3	11	1	10	6¼
13	23	8	–	69	124	4	–	1	12	–	12	10¼	3	12	1	10	10¼
14	25	4	–	70	126	–	–	1	13	–	13	2	3	13	1	11	2
15	27	–	–	71	127	16	–	1	14	–	13	6	3	14	1	11	6
16	28	16	–	72	129	12	–	1	15	–	13	9¾	3	15	1	11	9¾
17	30	12	–	73	131	8	–	1	16	–	14	1½	3	16	1	12	1½
18	32	8	–	74	133	4	–	1	17	–	14	5½	3	17	1	12	5½
19	34	4	–	75	135	–	–	1	18	–	14	9¼	3	18	1	12	9¼
20	36	–	–	76	136	16	–	1	19	–	15	1¼	3	19	1	13	1¼
21	37	16	–	77	138	12	–	1	20	–	15	5	3	20	1	13	5
22	39	12	–	78	140	8	–	1	21	–	15	9	3	21	1	13	9
23	41	8	–	79	142	4	–	1	22	–	16	–¾	3	22	1	14	–¾
24	43	4	–	80	144	–	–	1	23	–	16	4½	3	23	1	14	4½
25	45	–	–	81	145	16	–	1	24	–	16	8½	3	24	1	14	8½
26	46	16	–	82	147	12	–	1	25	–	17	–¼	3	25	1	15	–¼
27	48	12	–	83	149	8	–	1	26	–	17	4¼	3	26	1	15	4¼
28	50	8	–	84	151	4	–	1	27	–	17	8	3	27	1	15	8
29	52	4	–	85	153	–	–	2	—	–	18	–					
30	54	–	–	86	154	16	–	2	1	–	18	3¾	0	1	–	–	3¾
31	55	16	–	87	156	12	–	2	2	–	18	7½	0	2	–	–	7½
32	57	12	–	88	158	8	–	2	3	–	18	11½	0	3	–	–	11½
33	59	8	–	89	160	4	–	2	4	–	19	3¼	0	4	–	1	3¼
34	61	4	–	90	162	–	–	2	5	–	19	7¼	0	5	–	1	7¼
35	63	–	–	91	163	16	–	2	6	–	19	11	0	6	–	1	11
36	64	16	–	92	165	12	–	2	7	1	–	3	0	7	–	2	3
37	66	12	–	93	167	8	–	2	8	1	–	6¾	0	8	–	2	6¾
38	68	8	–	94	169	4	–	2	9	1	–	10½	0	9	–	2	10½
39	70	4	–	95	171	–	–	2	10	1	1	2½	0	10	–	3	2½
40	72	–	–	96	172	16	–	2	11	1	1	6¼	0	11	–	3	6¼
41	73	16	–	97	174	12	–	2	12	1	1	10¼	0	12	–	3	10¼
42	75	12	–	98	176	8	–	2	13	1	2	2	0	13	–	4	2
43	77	8	–	99	178	4	–	2	14	1	2	6	0	14	–	4	6
44	79	4	–	100	180	–	–	2	15	1	2	9¾	0	15	–	4	9¾
45	81	–	–	200	360	–	–	2	16	1	3	1½	0	16	–	5	1½
46	82	16	–	300	540	–	–	2	17	1	3	5½	0	17	–	5	5½
47	84	12	–	400	720	–	–	2	18	1	3	9¼	0	18	–	5	9¼
48	86	8	–	500	900	–	–	2	19	1	4	1¼	0	19	–	6	1¼
49	88	4	–	600	1080	–	–	2	20	1	4	5	0	20	–	6	5
50	90	–	–	700	1260	–	–	2	21	1	4	9	0	21	–	6	9
51	91	16	–	800	1440	–	–	2	22	1	5	–¾	0	22	–	7	–¾
52	93	12	–	900	1620	–	–	2	23	1	5	4½	0	23	–	7	4½
53	95	8	–	1000	1800	–	–	2	24	1	5	8½	0	24	–	7	8½
54	97	4	–	2000	3600	–	–	2	25	1	6	–¼	0	25	–	8	–¼
55	99	–	–	3000	5400	–	–	2	26	1	6	4¼	0	26	–	8	4¼
56	100	16	–	4000	7200	–	–	2	27	1	6	8	0	27	–	8	8

36*s*. 6*d*. *per Cwt*. **£36. 10*s*. *per Ton*.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	16	6	57	104	–	6	1	–	–	9	1½	3	–	1	7	4½
2	3	13	–	58	105	17	–	1	1	–	9	5¼	3	1	1	7	8¼
3	5	9	6	59	107	13	6	1	2	–	9	9¼	3	2	1	8	–¼
4	7	6	–	60	109	10	–	1	3	–	10	1	3	3	1	8	4
5	9	2	6	61	111	6	6	1	4	–	10	5	3	4	1	8	8
6	10	19	–	62	113	3	–	1	5	–	10	9	3	5	1	9	–
7	12	15	6	63	114	19	6	1	6	–	11	–¾	3	6	1	9	3¾
8	14	12	–	64	116	16	–	1	7	–	11	4¾	3	7	1	9	7¾
9	16	8	6	65	118	12	6	1	8	–	11	8¾	3	8	1	9	11¾
10	18	5	–	66	120	9	–	1	9	–	12	–½	3	9	1	10	3½
11	20	1	6	67	122	5	6	1	10	–	12	4½	3	10	1	10	7½
12	21	18	–	68	124	2	–	1	11	–	12	8½	3	11	1	10	11½
13	23	14	6	69	125	18	6	1	12	–	13	–¼	3	12	1	11	3¼
14	25	11	–	70	127	15	–	1	13	–	13	4¼	3	13	1	11	7¼
15	27	7	6	71	129	11	6	1	14	–	13	8¼	3	14	1	11	11¼
16	29	4	–	72	131	8	–	1	15	–	14	–	3	15	1	12	3
17	31	–	6	73	133	4	6	1	16	–	14	4	3	16	1	12	7
18	32	17	–	74	135	1	–	1	17	–	14	7¾	3	17	1	12	10¾
19	34	13	6	75	136	17	6	1	18	–	14	11¾	3	18	1	13	2¾
20	36	10	–	76	138	14	–	1	19	–	15	3¾	3	19	1	13	6¾
21	38	6	6	77	140	10	6	1	20	–	15	7½	3	20	1	13	10½
22	40	3	–	78	142	7	–	1	21	–	15	11½	3	21	1	14	2½
23	41	19	6	79	144	3	6	1	22	–	16	3½	3	22	1	14	6½
24	43	16	–	80	146	–	–	1	23	–	16	7¼	3	23	1	14	10¼
25	45	12	6	81	147	16	6	1	24	–	16	11¼	3	24	1	15	2¼
26	47	9	–	82	149	13	–	1	25	–	17	3¼	3	25	1	15	6¼
27	49	5	6	83	151	9	6	1	26	–	17	7	3	26	1	15	10
28	51	2	–	84	153	6	–	1	27	–	17	11	3	27	1	16	2
29	52	18	6	85	155	2	6	2	—	–	18	3					
30	54	15	–	86	156	19	–	2	1	–	18	6¾	0	1	–	–	3¾
31	56	11	6	87	158	15	6	2	2	–	18	10¾	0	2	–	–	7¾
32	58	8	–	88	160	12	–	2	3	–	19	2½	0	3	–	–	11½
33	60	4	6	89	162	8	6	2	4	–	19	6½	0	4	–	1	3½
34	62	1	–	90	164	5	–	2	5	–	19	10½	0	5	–	1	7½
35	63	17	6	91	166	1	6	2	6	1	–	2¼	0	6	–	1	11¼
36	65	14	–	92	167	18	–	2	7	1	–	6¼	0	7	–	2	3¼
37	67	10	6	93	169	14	6	2	8	1	–	10¼	0	8	–	2	7¼
38	69	7	–	94	171	11	–	2	9	1	1	2	0	9	–	2	11
39	71	3	6	95	173	7	6	2	10	1	1	6	0	10	–	3	3
40	73	–	–	96	175	4	–	2	11	1	1	10	0	11	–	3	7
41	74	16	6	97	177	–	6	2	12	1	2	1¾	0	12	–	3	10¾
42	76	13	–	98	178	17	–	2	13	1	2	5¾	0	13	–	4	2¾
43	78	9	6	99	180	13	6	2	14	1	2	9¾	0	14	–	4	6¾
44	80	6	–	100	182	10	–	2	15	1	3	1½	0	15	–	4	10½
45	82	2	6	200	365	–	–	2	16	1	3	5½	0	16	–	5	2½
46	83	19	–	300	547	10	–	2	17	1	3	9¼	0	17	–	5	6¼
47	85	15	6	400	730	–	–	2	18	1	4	1¼	0	18	–	5	10¼
48	87	12	–	500	912	10	–	2	19	1	4	5¼	0	19	–	6	2¼
49	89	8	6	600	1095	–	–	2	20	1	4	9	0	20	–	6	6
50	91	5	–	700	1277	10	–	2	21	1	5	1	0	21	–	6	10
51	93	1	6	800	1460	–	–	2	22	1	5	5	0	22	–	7	2
52	94	18	–	900	1642	10	–	2	23	1	5	8¾	0	23	–	7	5¾
53	96	14	6	1000	1825	–	–	2	24	1	6	–¾	0	24	–	7	9¾
54	98	11	–	2000	3650	–	–	2	25	1	6	4¾	0	25	–	8	1¾
55	100	7	6	3000	5475	–	–	2	26	1	6	8½	0	26	–	8	5½
56	102	4	–	4000	7300	–	–	2	27	1	7	–½	0	27	–	8	9½

£37. per Ton. 37*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	17	-	57	105	9	-	1	-	-	9	3	3	-	1	7	9
2	3	14	-	58	107	6	-	1	1	-	9	6¾	3	1	1	8	-¾
3	5	11	-	59	109	3	-	1	2	-	9	10¾	3	2	1	8	4¾
4	7	8	-	60	111	-	-	1	3	-	10	2¾	3	3	1	8	8¾
5	9	5	-	61	112	17	-	1	4	-	10	6¾	3	4	1	9	-¾
6	11	2	-	62	114	14	-	1	5	-	10	10¾	3	5	1	9	4¾
7	12	19	-	63	116	11	-	1	6	-	11	2¾	3	6	1	9	8¾
8	14	16	-	64	118	8	-	1	7	-	11	6¾	3	7	1	10	-¾
9	16	13	-	65	120	5	-	1	8	-	11	10½	3	8	1	10	4½
10	18	10	-	66	122	2	-	1	9	-	12	2½	3	9	1	10	8½
11	20	7	-	67	123	19	-	1	10	-	12	6½	3	10	1	11	-½
12	22	4	-	68	125	16	-	1	11	-	12	10½	3	11	1	11	4½
13	24	1	-	69	127	13	-	1	12	-	13	2½	3	12	1	11	8½
14	25	18	-	70	129	10	-	1	13	-	13	6½	3	13	1	12	-½
15	27	15	-	71	131	7	-	1	14	-	13	10½	3	14	1	12	4½
16	29	12	-	72	133	4	-	1	15	-	14	2¼	3	15	1	12	8¼
17	31	9	-	73	135	1	-	1	16	-	14	6¼	3	16	1	13	-¼
18	33	6	-	74	136	18	-	1	17	-	14	10¼	3	17	1	13	4¼
19	35	3	-	75	138	15	-	1	18	-	15	2¼	3	18	1	13	8¼
20	37	-	-	76	140	12	-	1	19	-	15	6¼	3	19	1	14	-¼
21	38	17	-	77	142	9	-	1	20	-	15	10¼	3	20	1	14	4¼
22	40	14	-	78	144	6	-	1	21	-	16	2¼	3	21	1	14	8¼
23	42	11	-	79	146	3	-	1	22	-	16	6	3	22	1	15	-
24	44	8	-	80	148	-	-	1	23	-	16	10	3	23	1	15	4
25	46	5	-	81	149	17	-	1	24	-	17	2	3	24	1	15	8
26	48	2	-	82	151	14	-	1	25	-	17	6	3	25	1	16	-
27	49	19	-	83	153	11	-	1	26	-	17	10	3	26	1	16	4
28	51	16	-	84	155	8	-	1	27	-	18	2	3	27	1	16	8
29	53	13	-	85	157	5	-	2	—	-	18	6					
30	55	10	-	86	159	2	-	2	1	-	18	9¾	0	1	-	-	3¾
31	57	7	-	87	160	19	-	2	2	-	19	1¾	0	2	-	-	7¾
32	59	4	-	88	162	16	-	2	3	-	19	5¾	0	3	-	-	11¾
33	61	1	-	89	164	13	-	2	4	-	19	9¾	0	4	-	1	3¾
34	62	18	-	90	166	10	-	2	5	1	-	1¾	0	5	-	1	7¾
35	64	15	-	91	168	7	-	2	6	1	-	5¾	0	6	-	1	11¾
36	66	12	-	92	170	4	-	2	7	1	-	9¾	0	7	-	2	3¾
37	68	9	-	93	172	1	-	2	8	1	1	1½	0	8	-	2	7½
38	70	6	-	94	173	18	-	2	9	1	1	5½	0	9	-	2	11½
39	72	3	-	95	175	15	-	2	10	1	1	9½	0	10	-	3	3½
40	74	-	-	96	177	12	-	2	11	1	2	1½	0	11	-	3	7½
41	75	17	-	97	179	9	-	2	12	1	2	5½	0	12	-	3	11½
42	77	14	-	98	181	6	-	2	13	1	2	9½	0	13	-	4	3½
43	79	11	-	99	183	3	-	2	14	1	3	1½	0	14	-	4	7½
44	81	8	-	100	185	-	-	2	15	1	3	5¼	0	15	-	4	11¼
45	83	5	-	200	370	-	-	2	16	1	3	9¼	0	16	-	5	3¼
46	85	2	-	300	555	-	-	2	17	1	4	1¼	0	17	-	5	7¼
47	86	19	-	400	740	-	-	2	18	1	4	5¼	0	18	-	5	11¼
48	88	16	-	500	925	-	-	2	19	1	4	9¼	0	19	-	6	3¼
49	90	13	-	600	1110	-	-	2	20	1	5	1¼	0	20	-	6	7¼
50	92	10	-	700	1295	-	-	2	21	1	5	5¼	0	21	-	6	11¼
51	94	7	-	800	1480	-	-	2	22	1	5	9	0	22	-	7	3
52	96	4	-	900	1665	-	-	2	23	1	6	1	0	23	-	7	7
53	98	1	-	1000	1850	-	-	2	24	1	6	5	0	24	-	7	11
54	99	18	-	2000	3700	-	-	2	25	1	6	9	0	25	-	8	3
55	101	15	-	3000	5550	-	-	2	26	1	7	1	0	26	-	8	7
56	103	12	-	4000	7400	-	-	2	27	1	7	5	0	27	-	8	11

37s. 4d. per Cwt. 4d. per lb. *£37. 6s. 8d. per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	17	4	57	106	8	–	1	–	–	9	4	3	–	1	8	–
2	3	14	8	58	108	5	4	1	1	–	9	8	3	1	1	8	4
3	5	12	–	59	110	2	8	1	2	–	10	–	3	2	1	8	8
4	7	9	4	60	112	–	–	1	3	–	10	4	3	3	1	9	–
5	9	6	8	61	113	17	4	1	4	–	10	8	3	4	1	9	4
6	11	4	–	62	115	14	8	1	5	–	11	–	3	5	1	9	8
7	13	1	4	63	117	12	–	1	6	–	11	4	3	6	1	10	–
8	14	18	8	64	119	9	4	1	7	–	11	8	3	7	1	10	4
9	16	16	–	65	121	6	8	1	8	–	12	–	3	8	1	10	8
10	18	13	4	66	123	4	–	1	9	–	12	4	3	9	1	11	–
11	20	10	8	67	125	1	4	1	10	–	12	8	3	10	1	11	4
12	22	8	–	68	126	18	8	1	11	–	13	–	3	11	1	11	8
13	24	5	4	69	128	16	–	1	12	–	13	4	3	12	1	12	–
14	26	2	8	70	130	13	4	1	13	–	13	8	3	13	1	12	4
15	28	–	–	71	132	10	8	1	14	–	14	–	3	14	1	12	8
16	29	17	4	72	134	8	–	1	15	–	14	4	3	15	1	13	–
17	31	14	8	73	136	5	4	1	16	–	14	8	3	16	1	13	4
18	33	12	–	74	138	2	8	1	17	–	15	–	3	17	1	13	8
19	35	9	4	75	140	–	–	1	18	–	15	4	3	18	1	14	–
20	37	6	8	76	141	17	4	1	19	–	15	8	3	19	1	14	4
21	39	4	–	77	143	14	8	1	20	–	16	–	3	20	1	14	8
22	41	1	4	78	145	12	–	1	21	–	16	4	3	21	1	15	–
23	42	18	8	79	147	9	4	1	22	–	16	8	3	22	1	15	4
24	44	16	–	80	149	6	8	1	23	–	17	–	3	23	1	15	8
25	46	13	4	81	151	4	–	1	24	–	17	4	3	24	1	16	–
26	48	10	8	82	153	1	4	1	25	–	17	8	3	25	1	16	4
27	50	8	–	83	154	18	8	1	26	–	18	–	3	26	1	16	8
28	52	5	4	84	156	16	–	1	27	–	18	4	3	27	1	17	–
29	54	2	8	85	158	13	4	2	—	–	18	8					
30	56	–	–	86	160	10	8	2	1	–	19	–	0	1	–	–	4
31	57	17	4	87	162	8	–	2	2	–	19	4	0	2	–	–	8
32	59	14	8	88	164	5	4	2	3	–	19	8	0	3	–	1	–
33	61	12	–	89	166	2	8	2	4	1	–	–	0	4	–	1	4
34	63	9	4	90	168	–	–	2	5	1	–	4	0	5	–	1	8
35	65	6	8	91	169	17	4	2	6	1	–	8	0	6	–	2	–
36	67	4	–	92	171	14	8	2	7	1	1	–	0	7	–	2	4
37	69	1	4	93	173	12	–	2	8	1	1	4	0	8	–	2	8
38	70	18	8	94	175	9	4	2	9	1	1	8	0	9	–	3	–
39	72	16	–	95	177	6	8	2	10	1	2	–	0	10	–	3	4
40	74	13	4	96	179	4	–	2	11	1	2	4	0	11	–	3	8
41	76	10	8	97	181	1	4	2	12	1	2	8	0	12	–	4	–
42	78	8	–	98	182	18	8	2	13	1	3	–	0	13	–	4	4
43	80	5	4	99	184	16	–	2	14	1	3	4	0	14	–	4	8
44	82	2	8	100	186	13	4	2	15	1	3	8	0	15	–	5	–
45	84	–	–	200	373	6	8	2	16	1	4	–	0	16	–	5	4
46	85	17	4	300	560	–	–	2	17	1	4	4	0	17	–	5	8
47	87	14	8	400	746	13	4	2	18	1	4	8	0	18	–	6	–
48	89	12	–	500	933	6	8	2	19	1	5	–	0	19	–	6	4
49	91	9	4	600	1120	–	–	2	20	1	5	4	0	20	–	6	8
50	93	6	8	700	1306	13	4	2	21	1	5	8	0	21	–	7	–
51	95	4	–	800	1493	6	8	2	22	1	6	–	0	22	–	7	4
52	97	1	4	900	1680	–	–	2	23	1	6	4	0	23	–	7	8
53	98	18	8	1000	1866	13	4	2	24	1	6	8	0	24	–	8	–
54	100	16	–	2000	3733	6	8	2	25	1	7	–	0	25	–	8	4
55	102	13	4	3000	5600	–	–	2	26	1	7	4	0	26	–	8	8
56	104	10	8	4000	7466	13	4	2	27	1	7	8	0	27	–	9	–

£37. 10*s.* *per Ton.*

37*s.* 6*d.* *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	17	6	57	106	17	6	1	–	–	9	4½	3	–	1	8	1½
2	3	15	–	58	108	15	–	1	1	–	9	8½	3	1	1	8	5½
3	5	12	6	59	110	12	6	1	2	–	10	–½	3	2	1	8	9½
4	7	10	–	60	112	10	–	1	3	–	10	4½	3	3	1	9	1½
5	9	7	6	61	114	7	6	1	4	–	10	8½	3	4	1	9	5½
6	11	5	–	62	116	5	–	1	5	–	11	–½	3	5	1	9	9½
7	13	2	6	63	118	2	6	1	6	–	11	4½	3	6	1	10	1½
8	15	–	–	64	120	–	–	1	7	–	11	8½	3	7	1	10	5½
9	16	17	6	65	121	17	6	1	8	–	12	–½	3	8	1	10	9½
10	18	15	–	66	123	15	–	1	9	–	12	4½	3	9	1	11	1½
11	20	12	6	67	125	12	6	1	10	–	12	8½	3	10	1	11	5½
12	22	10	–	68	127	10	–	1	11	–	13	–½	3	11	1	11	9½
13	24	7	6	69	129	7	6	1	12	–	13	4½	3	12	1	12	1½
14	26	5	–	70	131	5	–	1	13	–	13	8½	3	13	1	12	5½
15	28	2	6	71	133	2	6	1	14	–	14	–¾	3	14	1	12	9¾
16	30	–	–	72	135	–	–	1	15	–	14	4¾	3	15	1	13	1¾
17	31	17	6	73	136	17	6	1	16	–	14	8¾	3	16	1	13	5¾
18	33	15	–	74	138	15	–	1	17	–	15	–¾	3	17	1	13	9¾
19	35	12	6	75	140	12	6	1	18	–	15	4¾	3	18	1	14	1¾
20	37	10	–	76	142	10	–	1	19	–	15	8¾	3	19	1	14	5¾
21	39	7	6	77	144	7	6	1	20	–	16	–¾	3	20	1	14	9¾
22	41	5	–	78	146	5	–	1	21	–	16	4¾	3	21	1	15	1¾
23	43	2	6	79	148	2	6	1	22	–	16	8¾	3	22	1	15	5¾
24	45	–	–	80	150	–	–	1	23	–	17	–¾	3	23	1	15	9¾
25	46	17	6	81	151	17	6	1	24	–	17	4¾	3	24	1	16	1¾
26	48	15	–	82	153	15	–	1	25	–	17	8¾	3	25	1	16	5¾
27	50	12	6	83	155	12	6	1	26	–	18	–¾	3	26	1	16	9¾
28	52	10	–	84	157	10	–	1	27	–	18	4¾	3	27	1	17	1¾
29	54	7	6	85	159	7	6	2	—	–	18	9					
30	56	5	–	86	161	5	–	2	1	–	19	1	0	1	–	–	4
31	58	2	6	87	163	2	6	2	2	–	19	5	0	2	–	–	8
32	60	–	–	88	165	–	–	2	3	–	19	9	0	3	–	1	–
33	61	17	6	89	166	17	6	2	4	1	–	1	0	4	–	1	4
34	63	15	–	90	168	15	–	2	5	1	–	5	0	5	–	1	8
35	65	12	6	91	170	12	6	2	6	1	–	9	0	6	–	2	–
36	67	10	–	92	172	10	–	2	7	1	1	1	0	7	–	2	4
37	69	7	6	93	174	7	6	2	8	1	1	5	0	8	–	2	8
38	71	5	–	94	176	5	–	2	9	1	1	9	0	9	–	3	–
39	73	2	6	95	178	2	6	2	10	1	2	1	0	10	–	3	4
40	75	–	–	96	180	–	–	2	11	1	2	5	0	11	–	3	8
41	76	17	6	97	181	17	6	2	12	1	2	9	0	12	–	4	–
42	78	15	–	98	183	15	–	2	13	1	3	1	0	13	–	4	4
43	80	12	6	99	185	12	6	2	14	1	3	5¼	0	14	–	4	8¼
44	82	10	–	100	187	10	–	2	15	1	3	9¼	0	15	–	5	–¼
45	84	7	6	200	375	–	–	2	16	1	4	1¼	0	16	–	5	4¼
46	86	5	–	300	562	10	–	2	17	1	4	5¼	0	17	–	5	8¼
47	88	2	6	400	750	–	–	2	18	1	4	9¼	0	18	–	6	–¼
48	90	–	–	500	937	10	–	2	19	1	5	1¼	0	19	–	6	4¼
49	91	17	6	600	1125	–	–	2	20	1	5	5¼	0	20	–	6	8¼
50	93	15	–	700	1312	10	–	2	21	1	5	9¼	0	21	–	7	–¼
51	95	12	6	800	1500	–	–	2	22	1	6	1¼	0	22	–	7	4¼
52	97	10	–	900	1687	10	–	2	23	1	6	5¼	0	23	–	7	8¼
53	99	7	6	1000	1875	–	–	2	24	1	6	9¼	0	24	–	8	–¼
54	101	5	–	2000	3750	–	–	2	25	1	7	1¼	0	25	–	8	4¼
55	103	2	6	3000	5625	–	–	2	26	1	7	5¼	0	26	–	8	8¼
56	105	–	–	4000	7500	–	–	2	27	1	7	9¼	0	27	–	9	–¼

38*s*. *per Cwt.*

£38. *per Ton.*

Cwt	£.	s.	d.	wt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	1	18	–	57	108	6	–	1	–	–	9	6	3	–	1	8	6
2	3	16	–	58	110	4	–	1	1	–	9	10	3	1	1	8	10
3	5	14	–	59	112	2	–	1	2	–	10	2	3	2	1	9	2
4	7	12	–	60	114	–	–	1	3	–	10	6	3	3	1	9	6
5	9	10	–	61	115	18	–	1	4	–	10	10¼	3	4	1	9	10¼
6	11	8	–	62	117	16	–	1	5	–	11	2¼	3	5	1	10	2¼
7	13	6	–	63	119	14	–	1	6	–	11	6¼	3	6	1	10	6¼
8	15	4	–	64	121	12	–	1	7	–	11	10½	3	7	1	10	10½
9	17	2	–	65	123	10	–	1	8	–	12	2½	3	8	1	11	2½
10	19	–	–	66	125	8	–	1	9	–	12	6½	3	9	1	11	6½
11	20	18	–	67	127	6	–	1	10	–	12	10½	3	10	1	11	10½
12	22	16	–	68	129	4	–	1	11	–	13	2¾	3	11	1	12	2¾
13	24	14	–	69	131	2	–	1	12	–	13	6¾	3	12	1	12	6¾
14	26	12	–	70	133	–	–	1	13	–	13	10¾	3	13	1	12	10¾
15	28	10	–	71	134	18	–	1	14	–	14	3	3	14	1	13	3
16	30	8	–	72	136	16	–	1	15	–	14	7	3	15	1	13	7
17	32	6	–	73	138	14	–	1	16	–	14	11	3	16	1	13	11
18	34	4	–	74	140	12	–	1	17	–	15	3	3	17	1	14	3
19	36	2	–	75	142	10	–	1	18	–	15	7¼	3	18	1	14	7¼
20	38	–	–	76	144	8	–	1	19	–	15	11¼	3	19	1	14	11¼
21	39	18	–	77	146	6	–	1	20	–	16	3¼	3	20	1	15	3¼
22	41	16	–	78	148	4	–	1	21	–	16	7½	3	21	1	15	7½
23	43	14	–	79	150	2	–	1	22	–	16	11½	3	22	1	15	11½
24	45	12	–	80	152	–	–	1	23	–	17	3½	3	23	1	16	3½
25	47	10	–	81	153	18	–	1	24	–	17	7½	3	24	1	16	7½
26	49	8	–	82	155	16	–	1	25	–	17	11¾	3	25	1	16	11¾
27	51	6	–	83	157	14	–	1	26	–	18	3¾	3	26	1	17	3¾
28	53	4	–	84	159	12	–	1	27	–	18	7¾	3	27	1	17	7¾
29	55	2	–	85	161	10	–	2	—	–	19	–					
30	57	–	–	86	163	8	–	2	1	–	19	4	0	1	–	–	4
31	58	18	–	87	165	6	–	2	2	–	19	8	0	2	–	–	8
32	60	16	–	88	167	4	–	2	3	1	–	–	0	3	–	1	–
33	62	14	–	89	169	2	–	2	4	1	–	4¼	0	4	–	1	4¼
34	64	12	–	90	171	–	–	2	5	1	–	8¼	0	5	–	1	8¼
35	66	10	–	91	172	18	–	2	6	1	1	–¼	0	6	–	2	–¼
36	68	8	–	92	174	16	–	2	7	1	1	4½	0	7	–	2	4½
37	70	6	–	93	176	14	–	2	8	1	1	8½	0	8	–	2	8½
38	72	4	–	94	178	12	–	2	9	1	2	–½	0	9	–	3	–½
39	74	2	–	95	180	10	–	2	10	1	2	4½	0	10	–	3	4½
40	76	–	–	96	182	8	–	2	11	1	2	8¾	0	11	–	3	8¾
41	77	18	–	97	184	6	–	2	12	1	3	–¾	0	12	–	4	–¾
42	79	16	–	98	186	4	–	2	13	1	3	4¾	0	13	–	4	4¾
43	81	14	–	99	188	2	–	2	14	1	3	9	0	14	–	4	9
44	83	12	–	100	190	–	–	2	15	1	4	1	0	15	–	5	1
45	85	10	–	200	380	–	–	2	16	1	4	5	0	16	–	5	5
46	87	8	–	300	570	–	–	2	17	1	4	9	0	17	–	5	9
47	89	6	–	400	760	–	–	2	18	1	5	1¼	0	18	–	6	1¼
48	91	4	–	500	950	–	–	2	19	1	5	5¼	0	19	–	6	5¼
49	93	2	–	600	1140	–	–	2	20	1	5	9¼	0	20	–	6	9¼
50	95	–	–	700	1330	–	–	2	21	1	6	1½	0	21	–	7	1½
51	96	18	–	800	1520	–	–	2	22	1	6	5½	0	22	–	7	5½
52	98	16	–	900	1710	–	–	2	23	1	6	9½	0	23	–	7	9½
53	100	14	–	1000	1900	–	–	2	24	1	7	1½	0	24	–	8	1½
54	102	12	–	2000	3800	–	–	2	25	1	7	5¾	0	25	–	8	5¾
55	104	10	–	3000	5700	–	–	2	26	1	7	9¾	0	26	–	8	9¾
56	106	8	–	4000	7600	–	–	2	27	1	8	1¾	0	27	–	9	1¾

38s. 6d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	18	6	57	109	14	6	1	–	–	9	7½	3	–	1	8	10½
2	3	17	–	58	111	13	–	1	1	–	9	11½	3	1	1	9	2½
3	5	15	6	59	113	11	6	1	2	–	10	3¾	3	2	1	9	6¾
4	7	14	–	60	115	10	–	1	3	–	10	7¾	3	3	1	9	10¾
5	9	12	6	61	117	8	6	1	4	–	11	–	3	4	1	10	3
6	11	11	–	62	119	7	–	1	5	–	11	4	3	5	1	10	7
7	13	9	6	63	121	5	6	1	6	–	11	8¼	3	6	1	10	11¼
8	15	8	–	64	123	4	–	1	7	–	12	–¼	3	7	1	11	3¼
9	17	6	6	65	125	2	6	1	8	–	12	4½	3	8	1	11	7½
10	19	5	–	66	127	1	–	1	9	–	12	8½	3	9	1	11	11½
11	21	3	6	67	128	19	6	1	10	–	13	–¾	3	10	1	12	3¾
12	23	2	–	68	130	18	–	1	11	–	13	4¾	3	11	1	12	7¾
13	25	–	6	69	132	16	6	1	12	–	13	9	3	12	1	13	–
14	26	19	–	70	134	15	–	1	13	–	14	1	3	13	1	13	4
15	28	17	6	71	136	13	6	1	14	–	14	5¼	3	14	1	13	8¼
16	30	16	–	72	138	12	–	1	15	–	14	9¼	3	15	1	14	–¼
17	32	14	6	73	140	10	6	1	16	–	15	1½	3	16	1	14	4½
18	34	13	–	74	142	9	–	1	17	–	15	5½	3	17	1	14	8½
19	36	11	6	75	144	7	6	1	18	–	15	9¾	3	18	1	15	–¾
20	38	10	–	76	146	6	–	1	19	–	16	1¾	3	19	1	15	4¾
21	40	8	6	77	148	4	6	1	20	–	16	6	3	20	1	15	9
22	42	7	–	78	150	3	–	1	21	–	16	10	3	21	1	16	1
23	44	5	6	79	152	1	6	1	22	–	17	2¼	3	22	1	16	5¼
24	46	4	–	80	154	–	–	1	23	–	17	6¼	3	23	1	16	9¼
25	48	2	6	81	155	18	6	1	24	–	17	10½	3	24	1	17	1½
26	50	1	–	82	157	17	–	1	25	–	18	2½	3	25	1	17	5½
27	51	19	6	83	159	15	6	1	26	–	18	6¾	3	26	1	17	9¾
28	53	18	–	84	161	14	–	1	27	–	18	10¾	3	27	1	18	1¾
29	55	16	6	85	163	12	6	2	—	–	19	3					
30	57	15	–	86	165	11	–	2	1	–	19	7	0	1	–	–	4
31	59	13	6	87	167	9	6	2	2	–	19	11¼	0	2	–	–	8¼
32	61	12	–	88	169	8	–	2	3	1	–	3¼	0	3	–	1	–¼
33	63	10	6	89	171	6	6	2	4	1	–	7½	0	4	–	1	4½
34	65	9	–	90	173	5	–	2	5	1	–	11½	0	5	–	1	8½
35	67	7	6	91	175	3	6	2	6	1	1	3¾	0	6	–	2	–¾
36	69	6	–	92	177	2	–	2	7	1	1	7¾	0	7	–	2	4¾
37	71	4	6	93	179	–	6	2	8	1	2	–	0	8	–	2	9
38	73	3	–	94	180	19	–	2	9	1	2	4	0	9	–	3	1
39	75	1	6	95	182	17	6	2	10	1	2	8¼	0	10	–	3	5¼
40	77	–	–	96	184	16	–	2	11	1	3	–¼	0	11	–	3	9¼
41	78	18	6	97	186	14	6	2	12	1	3	4½	0	12	–	4	1½
42	80	17	–	98	188	13	–	2	13	1	3	8½	0	13	–	4	5½
43	82	15	6	99	190	11	6	2	14	1	4	–¾	0	14	–	4	9¾
44	84	14	–	100	192	10	–	2	15	1	4	4¾	0	15	–	5	1¾
45	86	12	6	200	385	–	–	2	16	1	4	9	0	16	–	5	6
46	88	11	–	300	577	10	–	2	17	1	5	1	0	17	–	5	10
47	90	9	6	400	770	–	–	2	18	1	5	5¼	0	18	–	6	2¼
48	92	8	–	500	962	10	–	2	19	1	5	9¼	0	19	–	6	6¼
49	94	6	6	600	1155	–	–	2	20	1	6	1½	0	20	–	6	10½
50	96	5	–	700	1347	10	–	2	21	1	6	5½	0	21	–	7	2½
51	98	3	6	800	1540	–	–	2	22	1	6	9¾	0	22	–	7	6¾
52	100	2	–	900	1732	10	–	2	23	1	7	1¾	0	23	–	7	10¾
53	102	–	6	1000	1925	–	–	2	24	1	7	6	0	24	–	8	3
54	103	19	–	2000	3850	–	–	2	25	1	7	10	0	25	–	8	7
55	105	17	6	3000	5775	–	–	2	26	1	8	2¼	0	26	–	8	11¼
56	107	16	–	4000	7700	–	–	2	27	1	8	6¼	0	27	–	9	3¼

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	19	–	57	111	3	–	1	–	–	9	9	3	–	1	9	3
2	3	18	–	58	113	2	–	1	1	–	10	1	3	1	1	9	7
3	5	17	–	59	115	1	–	1	2	–	10	5¼	3	2	1	9	11¼
4	7	16	–	60	117	–	–	1	3	–	10	9½	3	3	1	10	3½
5	9	15	–	61	118	19	–	1	4	–	11	1½	3	4	1	10	7½
6	11	14	–	62	120	18	–	1	5	–	11	5¾	3	5	1	10	11¾
7	13	13	–	63	122	17	–	1	6	–	11	10	3	6	1	11	4
8	15	12	–	64	124	16	–	1	7	–	12	2¼	3	7	1	11	8¼
9	17	11	–	65	126	15	–	1	8	–	12	6¼	3	8	1	12	–¼
10	19	10	–	66	128	14	–	1	9	–	12	10½	3	9	1	12	4½
11	21	9	–	67	130	13	–	1	10	–	13	2¾	3	10	1	12	8¾
12	23	8	–	68	132	12	–	1	11	–	13	6¾	3	11	1	13	–¾
13	25	7	–	69	134	11	–	1	12	–	13	11	3	12	1	13	5
14	27	6	–	70	136	10	–	1	13	–	14	3¼	3	13	1	13	9¼
15	29	5	–	71	138	9	–	1	14	–	14	7½	3	14	1	14	1½
16	31	4	–	72	140	8	–	1	15	–	14	11½	3	15	1	14	5½
17	33	3	–	73	142	7	–	1	16	–	15	3¾	3	16	1	14	9¾
18	35	2	–	74	144	6	–	1	17	–	15	8	3	17	1	15	2
19	37	1	–	75	146	5	–	1	18	–	16	–	3	18	1	15	6
20	39	–	–	76	148	4	–	1	19	–	16	4¼	3	19	1	15	10¼
21	40	19	–	77	150	3	–	1	20	–	16	8½	3	20	1	16	2½
22	42	18	–	78	152	2	–	1	21	–	17	–¾	3	21	1	16	6¾
23	44	17	–	79	154	1	–	1	22	–	17	4¾	3	22	1	16	10¾
24	46	16	–	80	156	–	–	1	23	–	17	9	3	23	1	17	3
25	48	15	–	81	157	19	–	1	24	–	18	1¼	3	24	1	17	7¼
26	50	14	–	82	159	18	–	1	25	–	18	5¼	3	25	1	17	11¼
27	52	13	–	83	161	17	–	1	26	–	18	9½	3	26	1	18	3½
28	54	12	–	84	163	16	–	1	27	–	19	1¾	3	27	1	18	7¾
29	56	11	–	85	165	15	–	2	—	–	19	6					
30	58	10	–	86	167	14	–	2	1	–	19	10	0	1	–	–	4
31	60	9	–	87	169	13	–	2	2	1	–	2¼	0	2	–	–	8¼
32	62	8	–	88	171	12	–	2	3	1	–	6½	0	3	–	1	–½
33	64	7	–	89	173	11	–	2	4	1	–	10½	0	4	–	1	4½
34	66	6	–	90	175	10	–	2	5	1	1	2¾	0	5	–	1	8¾
35	68	5	–	91	177	9	–	2	6	1	1	7	0	6	–	2	1
36	70	4	–	92	179	8	–	2	7	1	1	11¼	0	7	–	2	5¼
37	72	3	–	93	181	7	–	2	8	1	2	3¼	0	8	–	2	9¼
38	74	2	–	94	183	6	–	2	9	1	2	7½	0	9	–	3	1½
39	76	1	–	95	185	5	–	2	10	1	2	11¾	0	10	–	3	5¾
40	78	–	–	96	187	4	–	2	11	1	3	3¾	0	11	–	3	9¾
41	79	19	–	97	189	3	–	2	12	1	3	8	0	12	–	4	2
42	81	18	–	98	191	2	–	2	13	1	4	–¼	0	13	–	4	6¼
43	83	17	–	99	193	1	–	2	14	1	4	4½	0	14	–	4	10½
44	85	16	–	100	195	–	–	2	15	1	4	8½	0	15	–	5	2½
45	87	15	–	200	390	–	–	2	16	1	5	–¾	0	16	–	5	6¾
46	89	14	–	300	585	–	–	2	17	1	5	5	0	17	–	5	11
47	91	13	–	400	780	–	–	2	18	1	5	9	0	18	–	6	3
48	93	12	–	500	975	–	–	2	19	1	6	1¼	0	19	–	6	7¼
49	95	11	–	600	1170	–	–	2	20	1	6	5½	0	20	–	6	11½
50	97	10	–	700	1365	–	–	2	21	1	6	9¾	0	21	–	7	3¾
51	99	9	–	800	1560	–	–	2	22	1	7	1¾	0	22	–	7	7¾
52	101	8	–	900	1755	–	–	2	23	1	7	6	0	23	–	8	–
53	103	7	–	1000	1950	–	–	2	24	1	7	10¼	0	24	–	8	4¼
54	105	6	–	2000	3900	–	–	2	25	1	8	2¼	0	25	–	8	8¼
55	107	5	–	3000	5850	–	–	2	26	1	8	6½	0	26	–	9	–½
56	109	4	–	4000	7800	–	–	2	27	1	8	10¾	0	27	–	9	4¾

£39. 10s. per Ton.

39*s*. 6*d*. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	19	6	57	112	11	6	1	~	~	9	10½	3	~	1	9	7½
2	3	19	~	58	114	11	~	1	1	~	10	2½	3	1	1	9	11½
3	5	18	6	59	116	10	6	1	2	~	10	6¾	3	2	1	10	3¾
4	7	18	~	60	118	10	~	1	3	~	10	11	3	3	1	10	8
5	9	17	6	61	120	9	6	1	4	~	11	3¼	3	4	1	11	~¼
6	11	17	~	62	122	9	~	1	5	~	11	7½	3	5	1	11	4½
7	13	16	6	63	124	8	6	1	6	~	11	11¾	3	6	1	11	8¾
8	15	16	~	64	136	8	~	1	7	~	12	4	3	7	1	12	1
9	17	15	6	65	138	7	6	1	8	~	12	8¼	3	8	1	12	5¼
10	19	15	~	66	130	7	~	1	9	~	13	~½	3	9	1	12	9½
11	21	14	6	67	132	6	6	1	10	~	13	4¾	3	10	1	13	1¾
12	23	14	~	68	134	6	~	1	11	~	13	9	3	11	1	13	6
13	25	13	6	69	136	5	6	1	12	~	14	1¼	3	12	1	13	10¼
14	27	13	~	70	138	5	~	1	13	~	14	5½	3	13	1	14	2½
15	29	12	6	71	140	4	6	1	14	~	14	9¾	3	14	1	14	6¾
16	31	12	~	72	142	4	~	1	15	~	15	1¾	3	15	1	14	10¾
17	33	11	6	73	144	3	6	1	16	~	15	6	3	16	1	15	3
18	35	11	~	74	146	3	~	1	17	~	15	10¼	3	17	1	15	7¼
19	37	10	6	75	148	2	6	1	18	~	16	2½	3	18	1	15	11½
20	39	10	~	76	150	2	~	1	19	~	16	6¾	3	19	1	16	3¾
21	41	9	6	77	152	1	6	1	20	~	16	11	3	20	1	16	8
22	43	9	~	78	154	1	~	1	21	~	17	3¼	3	21	1	17	~¼
23	45	8	6	79	156	~	6	1	22	~	17	7½	3	22	1	17	4½
24	47	8	~	80	158	~	~	1	23	~	17	11¾	3	23	1	17	8¾
25	49	7	6	81	159	19	6	1	24	~	18	4	3	24	1	18	1
26	51	7	~	82	161	19	~	1	25	~	18	8¼	3	25	1	18	5¼
27	53	6	6	83	163	18	6	1	26	~	19	~½	3	26	1	18	9½
28	55	6	~	84	165	18	~	1	27	~	19	4¾	3	27	1	19	1¾
29	57	5	6	85	167	17	6	2	—	~	19	9					
30	59	5	~	86	169	17	~	2	1	1	~	1	0	1	~	~	4
31	61	4	6	87	171	16	6	2	2	1	~	5¼	0	2	~	~	8¼
32	63	4	~	88	173	16	~	2	3	1	~	9½	0	3	~	1	~½
33	65	3	6	89	175	15	6	2	4	1	1	1¾	0	4	~	1	4¾
34	67	3	~	90	177	15	~	2	5	1	1	6	0	5	~	1	9
35	69	2	6	91	179	14	6	2	6	1	1	10¼	0	6	~	2	1¼
36	71	2	~	92	181	14	~	2	7	1	2	2½	0	7	~	2	5½
37	73	1	6	93	183	13	6	2	8	1	2	6¾	0	8	~	2	9¾
38	75	1	~	94	185	13	~	2	9	1	2	11	0	9	~	3	2
39	77	~	6	95	187	12	6	2	10	1	3	3¼	0	10	~	3	6¼
40	79	~	~	96	189	12	~	2	11	1	3	7½	0	11	~	3	10½
41	80	19	6	97	191	11	6	2	12	1	3	11¾	0	12	~	4	2¾
42	82	19	~	98	193	11	~	2	13	1	4	4	0	13	~	4	7
43	84	18	6	99	195	10	6	2	14	1	4	8¼	0	14	~	4	11¼
44	86	18	~	100	197	10	~	2	15	1	5	~¼	0	15	~	5	3¼
45	88	17	6	200	395	~	~	2	16	1	5	4½	0	16	~	5	7½
46	90	17	~	300	592	10	~	2	17	1	5	8¾	0	17	~	5	11¾
47	92	16	6	400	790	~	~	2	18	1	6	1	0	18	~	6	4
48	94	16	~	500	987	10	~	2	19	1	6	5¼	0	19	~	6	8¼
49	96	15	6	600	1185	~	~	2	20	1	6	9½	0	20	~	7	~½
50	98	15	~	700	1382	10	~	2	21	1	7	1¾	0	21	~	7	4¾
51	100	14	6	800	1580	~	~	2	22	1	7	6	0	22	~	7	9
52	102	14	~	900	1777	10	~	2	23	1	7	10¼	0	23	~	8	1¼
53	104	13	6	1000	1975	~	~	2	24	1	8	2½	0	24	~	8	5½
54	106	13	~	2000	3950	~	~	2	25	1	8	6¾	0	25	~	8	9¾
55	108	12	6	3000	5925	~	~	2	26	1	8	11	0	26	~	9	2
56	110	12	~	4000	7900	~	~	2	27	1	9	3¼	0	27	~	9	6¼

39*s*. 8*d*. *per Cwt.* 4¼*d*. *per lb.* £39. 13*s*. 4*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	1	19	8	57	113	1	–	1	–	–	9	11	3	–	1	9	9
2	3	19	4	58	115	–	8	1	1	–	10	3¼	3	1	1	10	1¼
3	5	19	–	59	117	–	4	1	2	–	10	7½	3	2	1	10	5½
4	7	18	8	60	119	–	–	1	3	–	10	11¾	3	3	1	10	9¾
5	9	18	4	61	120	19	8	1	4	–	11	4	3	4	1	11	2
6	11	18	–	62	122	19	4	1	5	–	11	8¼	3	5	1	11	6¼
7	13	17	8	63	124	19	–	1	6	–	12	–½	3	6	1	11	10½
8	15	17	4	64	126	18	8	1	7	–	12	4¾	3	7	1	12	2¾
9	17	17	–	65	128	18	4	1	8	–	12	9	3	8	1	12	7
10	19	16	8	66	130	18	–	1	9	–	13	1¼	3	9	1	12	11¼
11	21	16	4	67	132	17	8	1	10	–	13	5½	3	10	1	13	3½
12	23	16	–	68	134	17	4	1	11	–	13	9¾	3	11	1	13	7¾
13	25	15	8	69	136	17	–	1	12	–	14	2	3	12	1	14	–
14	27	15	4	70	138	16	8	1	13	–	14	6¼	3	13	1	14	4¼
15	29	15	–	71	140	16	4	1	14	–	14	10½	3	14	1	14	8½
16	31	14	8	72	142	16	–	1	15	–	15	2¾	3	15	1	15	–¾
17	33	14	4	73	144	15	8	1	16	–	15	7	3	16	1	15	5
18	35	14	–	74	146	15	4	1	17	–	15	11¼	3	17	1	15	9¼
19	37	13	8	75	148	15	–	1	18	–	16	3½	3	18	1	16	1½
20	39	13	4	76	150	14	8	1	19	–	16	7¾	3	19	1	16	5¾
21	41	13	–	77	152	14	4	1	20	–	17	–	3	20	1	16	10
22	43	12	8	78	154	14	–	1	21	–	17	4¼	3	21	1	17	2¼
23	45	12	4	79	156	13	8	1	22	–	17	8½	3	22	1	17	6½
24	47	12	–	80	158	13	4	1	23	–	18	–¾	3	23	1	17	10¾
25	49	11	8	81	160	13	–	1	24	–	18	5	3	24	1	18	3
26	51	11	4	82	162	12	8	1	25	–	18	9¼	3	25	1	18	7¼
27	53	11	–	83	164	12	4	1	26	–	19	1½	3	26	1	18	11½
28	55	10	8	84	166	12	–	1	27	–	19	5¾	3	27	1	19	3¾
29	57	10	4	85	168	11	8	2	—	–	19	10					
30	59	10	–	86	170	11	4	2	1	1	–	2¼	0	1	–	–	4¼
31	61	9	8	87	172	11	–	2	2	1	–	6½	0	2	–	–	8½
32	63	9	4	88	174	10	8	2	3	1	–	10¾	0	3	–	1	–¾
33	65	9	–	89	176	10	4	2	4	1	1	3	0	4	–	1	5
34	67	8	8	90	178	10	–	2	5	1	1	7¼	0	5	–	1	9¼
35	69	8	4	91	180	9	8	2	6	1	1	11½	0	6	–	2	1½
36	71	8	–	92	182	9	4	2	7	1	2	3¾	0	7	–	2	5¾
37	73	7	8	93	184	9	–	2	8	1	2	8	0	8	–	2	10
38	75	7	4	94	186	8	8	2	9	1	3	–¼	0	9	–	3	2¼
39	77	7	–	95	188	8	4	2	10	1	3	4½	0	10	–	3	6½
40	79	6	8	96	190	8	–	2	11	1	3	8¾	0	11	–	3	10¾
41	81	6	4	97	192	7	8	2	12	1	4	1	0	12	–	4	3
42	83	6	–	98	194	7	4	2	13	1	4	5¼	0	13	–	4	7¼
43	85	5	8	99	196	7	–	2	14	1	4	9½	0	14	–	4	11½
44	87	5	4	100	198	6	8	2	15	1	5	1¾	0	15	–	5	3¾
45	89	5	–	200	396	13	4	2	16	1	5	6	0	16	–	5	8
46	91	4	8	300	595	–	–	2	17	1	5	10¼	0	17	–	6	–¼
47	93	4	4	400	793	6	8	2	18	1	6	2½	0	18	–	6	4½
48	95	4	–	500	991	13	4	2	19	1	6	6¾	0	19	–	6	8¾
49	97	3	8	600	1190	–	–	2	20	1	6	11	0	20	–	7	1
50	99	3	4	700	1388	6	8	2	21	1	7	3¼	0	21	–	7	5¼
51	101	3	–	800	1586	13	4	2	22	1	7	7½	0	22	–	7	9½
52	103	2	8	900	1785	–	–	2	23	1	7	11¾	0	23	–	8	1¾
53	105	2	4	1000	1983	6	8	2	24	1	8	4	0	24	–	8	6
54	107	2	–	2000	3966	13	4	2	25	1	8	8¼	0	25	–	8	10¼
55	109	1	8	3000	5950	–	–	2	26	1	9	–½	0	26	–	9	2½
56	111	1	4	4000	7933	6	8	2	27	1	9	4¾	0	27	–	9	6¾

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	–	–	57	114	–	–	1	–	–	10	–	3	–	1	10	–
2	4	–	–	58	116	–	–	1	1	–	10	4¼	3	1	1	10	4¼
3	6	–	–	59	118	–	–	1	2	–	10	8½	3	2	1	10	8½
4	8	–	–	60	120	–	–	1	3	–	11	–¾	3	3	1	11	–¾
5	10	–	–	61	122	–	–	1	4	–	11	5	3	4	1	11	5
6	12	–	–	62	124	–	–	1	5	–	11	9¼	3	5	1	11	9¼
7	14	–	–	63	126	–	–	1	6	–	12	1½	3	6	1	12	1½
8	16	–	–	64	128	–	–	1	7	–	12	6	3	7	1	12	6
9	18	–	–	65	130	–	–	1	8	–	12	10¼	3	8	1	12	10¼
10	20	–	–	66	132	–	–	1	9	–	13	2½	3	9	1	13	2½
11	22	–	–	67	134	–	–	1	10	–	13	6¾	3	10	1	13	6¾
12	24	–	–	68	136	–	–	1	11	–	13	11	3	11	1	13	11
13	26	–	–	69	138	–	–	1	12	–	14	3¼	3	12	1	14	3¼
14	28	–	–	70	140	–	–	1	13	–	14	7½	3	13	1	14	7½
15	30	–	–	71	142	–	–	1	14	–	15	–	3	14	1	15	–
16	32	–	–	72	144	–	–	1	15	–	15	4¼	3	15	1	15	4¼
17	34	–	–	73	146	–	–	1	16	–	15	8½	3	16	1	15	8½
18	36	–	–	74	148	–	–	1	17	–	16	–¾	3	17	1	16	–¾
19	38	–	–	75	150	–	–	1	18	–	16	5	3	18	1	16	5
20	40	–	–	76	152	–	–	1	19	–	16	9¼	3	19	1	16	9¼
21	42	–	–	77	154	–	–	1	20	–	17	1½	3	20	1	17	1½
22	44	–	–	78	156	–	–	1	21	–	17	6	3	21	1	17	6
23	46	–	–	79	158	–	–	1	22	–	17	10¼	3	22	1	17	10¼
24	48	–	–	80	160	–	–	1	23	–	18	2½	3	23	1	18	2½
25	50	–	–	81	162	–	–	1	24	–	18	6¾	3	24	1	18	6¾
26	52	–	–	82	164	–	–	1	25	–	18	11	3	25	1	18	11
27	54	–	–	83	166	–	–	1	26	–	19	3¼	3	26	1	19	3¼
28	56	–	–	84	168	–	–	1	27	–	19	7½	3	27	1	19	7½
29	58	–	–	85	170	–	–	2	—	1	–	–					
30	60	–	–	86	172	–	–	2	1	1	–	4¼	0	1	–	–	4¼
31	62	–	–	87	174	–	–	2	2	1	–	8½	0	2	–	–	8½
32	64	–	–	88	176	–	–	2	3	1	1	–¾	0	3	–	1	–¾
33	66	–	–	89	178	–	–	2	4	1	1	5	0	4	–	1	5
34	68	–	–	90	180	–	–	2	5	1	1	9¼	0	5	–	1	9¼
35	70	–	–	91	182	–	–	2	6	1	2	1½	0	6	–	2	1½
36	72	–	–	92	184	–	–	2	7	1	2	6	0	7	–	2	6
37	74	–	–	93	186	–	–	2	8	1	2	10¼	0	8	–	2	10¼
38	76	–	–	94	188	–	–	2	9	1	3	2½	0	9	–	3	2½
39	78	–	–	95	190	–	–	2	10	1	3	6¾	0	10	–	3	6¾
40	80	–	–	96	192	–	–	2	11	1	3	11	0	11	–	3	11
41	82	–	–	97	194	–	–	2	12	1	4	3¼	0	12	–	4	3¼
42	84	–	–	98	196	–	–	2	13	1	4	7½	0	13	–	4	7½
43	86	–	–	99	198	–	–	2	14	1	5	–	0	14	–	5	–
44	88	–	–	100	200	–	–	2	15	1	5	4¼	0	15	–	5	4¼
45	90	–	–	200	400	–	–	2	16	1	5	8½	0	16	–	5	8½
46	92	–	–	300	600	–	–	2	17	1	6	–¾	0	17	–	6	–¾
47	94	–	–	400	800	–	–	2	18	1	6	5	0	18	–	6	5
48	96	–	–	500	1000	–	–	2	19	1	6	9¼	0	19	–	6	9¼
49	98	–	–	600	1200	–	–	2	20	1	7	1½	0	20	–	7	1½
50	100	–	–	700	1400	–	–	2	21	1	7	6	0	21	–	7	6
51	102	–	–	800	1600	–	–	2	22	1	7	10¼	0	22	–	7	10¼
52	104	–	–	900	1800	–	–	2	23	1	8	2½	0	23	–	8	2½
53	106	–	–	1000	2000	–	–	2	24	1	8	6¾	0	24	–	8	6¾
54	108	–	–	2000	4000	–	–	2	25	1	8	11	0	25	–	8	11
55	110	–	–	3000	6000	–	–	2	26	1	9	3¼	0	26	–	9	3¼
56	112	–	–	4000	8000	–	–	2	27	1	9	7½	0	27	–	9	7½

40s. 6d. per Cwt. **£40. 10s. *per Ton.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	-	6	57	115	8	6	1	-	-	10	1½	3	-	1	10	4½
2	4	1	-	58	117	9	-	1	1	-	10	5¾	3	1	1	10	8¾
3	6	1	6	59	119	9	6	1	2	-	10	10	3	2	1	11	1
4	8	2	-	60	121	10	-	1	3	-	11	2½	3	3	1	11	5½
5	10	2	6	61	123	10	6	1	4	-	11	6¾	3	4	1	11	9¾
6	12	3	-	62	125	11	-	1	5	-	11	11	3	5	1	12	2
7	14	3	6	63	127	11	6	1	6	-	12	3½	3	6	1	12	6½
8	16	4	-	64	129	12	-	1	7	-	12	7¾	3	7	1	12	10¾
9	18	4	6	65	131	12	6	1	8	-	13	-	3	8	1	13	3
10	20	5	-	66	133	13	-	1	9	-	13	4½	3	9	1	13	7½
11	22	5	6	67	135	13	6	1	10	-	13	8¾	3	10	1	13	11¾
12	24	6	-	68	137	14	-	1	11	-	14	1	3	11	1	14	4
13	26	6	6	69	139	14	6	1	12	-	14	5½	3	12	1	14	8½
14	28	7	-	70	141	15	-	1	13	-	14	9¾	3	13	1	15	-¾
15	30	7	6	71	143	15	6	1	14	-	15	2¼	3	14	1	15	5¼
16	32	8	-	72	145	16	-	1	15	-	15	6½	3	15	1	15	9½
17	34	8	6	73	147	16	6	1	16	-	15	10¾	3	16	1	16	1¾
18	36	9	-	74	149	17	-	1	17	-	16	3¼	3	17	1	16	6¼
19	38	9	6	75	151	17	6	1	18	-	16	7½	3	18	1	16	10½
20	40	10	-	76	153	18	-	1	19	-	16	11¾	3	19	1	17	2¾
21	42	10	6	77	155	18	6	1	20	-	17	4¼	3	20	1	17	7¼
22	44	11	-	78	157	19	-	1	21	-	17	8½	3	21	1	17	11½
23	46	11	6	79	159	19	6	1	22	-	18	-¾	3	22	1	18	3¾
24	48	12	-	80	162	-	-	1	23	-	18	5¼	3	23	1	18	8¼
25	50	12	6	81	164	-	6	1	24	-	18	9½	3	24	1	19	-½
26	52	13	-	82	166	1	-	1	25	-	19	1¾	3	25	1	19	4¾
27	54	13	6	83	168	1	6	1	26	-	19	6¼	3	26	1	19	9¼
28	56	14	-	84	170	2	-	1	27	-	19	10½	3	27	2	-	1½
29	58	14	6	85	172	2	6	2	—	1	-	3					
30	60	15	-	86	174	3	-	2	1	1	-	7¼	0	1	-	-	4¼
31	62	15	6	87	176	3	6	2	2	1	-	11½	0	2	-	-	8½
32	64	16	-	88	178	4	-	2	3	1	1	4	0	3	-	1	1
33	66	16	6	89	180	4	6	2	4	1	1	8¼	0	4	-	1	5¼
34	68	17	-	90	182	5	-	2	5	1	2	-½	0	5	-	1	9½
35	70	17	6	91	184	5	6	2	6	1	2	5	0	6	-	2	2
36	72	18	-	92	186	6	-	2	7	1	2	9¼	0	7	-	2	6¼
37	74	18	6	93	188	6	6	2	8	1	3	1½	0	8	-	2	10½
38	76	19	-	94	190	7	-	2	9	1	3	6	0	9	-	3	3
39	78	19	6	95	192	7	6	2	10	1	3	10¼	0	10	-	3	7¼
40	81	-	-	96	194	8	-	2	11	1	4	2½	0	11	-	3	11½
41	83	-	6	97	196	8	6	2	12	1	4	7	0	12	-	4	4
42	85	1	-	98	198	9	-	2	13	1	4	11¼	0	13	-	4	8¼
43	87	1	6	99	200	9	6	2	14	1	5	3¾	0	14	-	5	-¾
44	89	2	-	100	202	10	-	2	15	1	5	8	0	15	-	5	5
45	91	2	6	200	405	-	-	2	16	1	6	-¼	0	16	-	5	9¼
46	93	3	-	300	607	10	-	2	17	1	6	4¾	0	17	-	6	1¾
47	95	3	6	400	810	-	-	2	18	1	6	9	0	18	-	6	6
48	97	4	-	500	1012	10	-	2	19	1	7	1¼	0	19	-	6	10¼
49	99	4	6	600	1215	-	-	2	20	1	7	5¾	0	20	-	7	2¾
50	101	5	-	700	1417	10	-	2	21	1	7	10	0	21	-	7	7
51	103	5	6	800	1620	-	-	2	22	1	8	2¼	0	22	-	7	11¼
52	105	6	-	900	1822	10	-	2	23	1	8	6¾	0	23	-	8	3¾
53	107	6	6	1000	2025	-	-	2	24	1	8	11	0	24	-	8	8
54	109	7	-	2000	4050	-	-	2	25	1	9	3¼	0	25	-	9	-¼
55	111	7	6	3000	6075	-	-	2	26	1	9	7¾	0	26	-	9	4¾
56	113	8	-	4000	8100	-	-	2	27	1	10	-	0	27	-	9	9

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	1	–	57	116	17	–	1	–	–	10	3	3	–	1	10	9
2	4	2	–	58	118	18	–	1	1	–	10	7¼	3	1	1	11	1¼
3	6	3	–	59	120	19	–	1	2	–	10	11¾	3	2	1	11	5¾
4	8	4	–	60	123	–	–	1	3	–	11	4	3	3	1	11	10
5	10	5	–	61	125	1	–	1	4	–	11	8½	3	4	1	12	2½
6	12	6	–	62	127	2	–	1	5	–	12	–¾	3	5	1	12	6¾
7	14	7	–	63	129	3	–	1	6	–	12	5¼	3	6	1	12	11¼
8	16	8	–	64	131	4	–	1	7	–	12	9¾	3	7	1	13	3¾
9	18	9	–	65	133	5	–	1	8	–	13	2	3	8	1	13	8
10	20	10	–	66	135	6	–	1	9	–	13	6½	3	9	1	14	–½
11	22	11	–	67	137	7	–	1	10	–	13	10¾	3	10	1	14	4¾
12	24	12	–	68	139	8	–	1	11	–	14	3¼	3	11	1	14	9¼
13	26	13	–	69	141	9	–	1	12	–	14	7½	3	12	1	15	1½
14	28	14	–	70	143	10	–	1	13	–	15	–	3	13	1	15	6
15	30	15	–	71	145	11	–	1	14	–	15	4½	3	14	1	15	10½
16	32	16	–	72	147	12	–	1	15	–	15	8¾	3	15	1	16	2¾
17	34	17	–	73	149	13	–	1	16	–	16	1¼	3	16	1	16	7¼
18	36	18	–	74	151	14	–	1	17	–	16	5½	3	17	1	16	11½
19	38	19	–	75	153	15	–	1	18	–	16	10	3	18	1	17	4
20	41	–	–	76	155	16	–	1	19	–	17	2¼	3	19	1	17	8¼
21	43	1	–	77	157	17	–	1	20	–	17	6¾	3	20	1	18	–¾
22	45	2	–	78	159	18	–	1	21	–	17	11¼	3	21	1	18	5¼
23	47	3	–	79	161	19	–	1	22	–	18	3½	3	22	1	18	9½
24	49	4	–	80	164	–	–	1	23	–	18	8	3	23	1	19	2
25	51	5	–	81	166	1	–	1	24	–	19	–¼	3	24	1	19	6¼
26	53	6	–	82	168	2	–	1	25	–	19	4¾	3	25	1	19	10¾
27	55	7	–	83	170	3	–	1	26	–	19	9	3	26	2	–	3
28	57	8	–	84	172	4	–	1	27	1	–	1½	3	27	2	–	7½
29	59	9	–	85	174	5	–	2	—	1	–	6					
30	61	10	–	86	176	6	–	2	1	1	–	10¼	0	1	–	–	4¼
31	63	11	–	87	178	7	–	2	2	1	1	2¾	0	2	–	–	8¾
32	65	12	–	88	180	8	–	2	3	1	1	7	0	3	–	1	1
33	67	13	–	89	182	9	–	2	4	1	1	11½	0	4	–	1	5½
34	69	14	–	90	184	10	–	2	5	1	2	3¾	0	5	–	1	9¾
35	71	15	–	91	186	11	–	2	6	1	2	8¼	0	6	–	2	2¼
36	73	16	–	92	188	12	–	2	7	1	3	–¾	0	7	–	2	6¾
37	75	17	–	93	190	13	–	2	8	1	3	5	0	8	–	2	11
38	77	18	–	94	192	14	–	2	9	1	3	9½	0	9	–	3	3½
39	79	19	–	95	194	15	–	2	10	1	4	1¾	0	10	–	3	7¾
40	82	–	–	96	196	16	–	2	11	1	4	6¼	0	11	–	4	–¼
41	84	1	–	97	198	17	–	2	12	1	4	10½	0	12	–	4	4½
42	86	2	–	98	200	18	–	2	13	1	5	3	0	13	–	4	9
43	88	3	–	99	202	19	–	2	14	1	5	7½	0	14	–	5	1½
44	90	4	–	100	205	–	–	2	15	1	5	11¾	0	15	–	5	5¾
45	92	5	–	200	410	–	–	2	16	1	6	4¼	0	16	–	5	10¼
46	94	6	–	300	615	–	–	2	17	1	6	8½	0	17	–	6	2½
47	96	7	–	400	820	–	–	2	18	1	7	1	0	18	–	6	7
48	98	8	–	500	1025	–	–	2	19	1	7	5¼	0	19	–	6	11¼
49	100	9	–	600	1230	–	–	2	20	1	7	9¾	0	20	–	7	3¾
50	102	10	–	700	1435	–	–	2	21	1	8	2¼	0	21	–	7	8¼
51	104	11	–	800	1640	–	–	2	22	1	8	6½	0	22	–	8	–½
52	106	12	–	900	1845	–	–	2	23	1	8	11	0	23	–	8	5
53	108	13	–	1000	2050	–	–	2	24	1	9	3¼	0	24	–	8	9¼
54	110	14	–	2000	4100	–	–	2	25	1	9	7¾	0	25	–	9	1¾
55	112	15	–	3000	6150	–	–	2	26	1	10	–	0	26	–	9	6
56	114	16	–	4000	8200	–	–	2	27	1	10	4½	0	27	–	9	10½

41*s.* 6*d.* *per Cwt.* £41. 10*s. per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	1	6	57	118	5	6	1	–	–	10	4½	3	–	1	11	1½
2	4	3	–	58	120	7	–	1	1	–	10	8¾	3	1	1	11	5¾
3	6	4	6	59	122	8	6	1	2	–	11	1¼	3	2	1	11	10¼
4	8	6	–	60	124	10	–	1	3	–	11	5¾	3	3	1	12	2¾
5	10	7	6	61	126	11	6	1	4	–	11	10¼	3	4	1	12	7¼
6	12	9	–	62	128	13	–	1	5	–	12	2½	3	5	1	12	11½
7	14	10	6	63	130	14	6	1	6	–	12	7	3	6	1	13	4
8	16	12	–	64	132	16	–	1	7	–	12	11½	3	7	1	13	8½
9	18	13	6	65	134	17	6	1	8	–	13	4	3	8	1	14	1
10	20	15	–	66	136	19	–	1	9	–	13	8½	3	9	1	14	5½
11	22	16	6	67	139	–	6	1	10	–	14	–¾	3	10	1	14	9¾
12	24	18	–	68	141	2	–	1	11	–	14	5¼	3	11	1	15	2¼
13	26	19	6	69	143	3	6	1	12	–	14	9¾	3	12	1	15	6¾
14	29	1	–	70	145	5	–	1	13	–	15	2¼	3	13	1	15	11¼
15	31	2	6	71	147	6	6	1	14	–	15	6¾	3	14	1	16	3¾
16	33	4	–	72	149	8	–	1	15	–	15	11	3	15	1	16	8
17	35	5	6	73	151	9	6	1	16	–	16	3½	3	16	1	17	–½
18	37	7	–	74	153	11	–	1	17	–	16	8	3	17	1	17	5
19	39	8	6	75	155	12	6	1	18	–	17	–½	3	18	1	17	9½
20	41	10	–	76	157	14	–	1	19	–	17	4¾	3	19	1	18	1¾
21	43	11	6	77	159	15	6	1	20	–	17	9¼	3	20	1	18	6¼
22	45	13	–	78	161	17	–	1	21	–	18	1¾	3	21	1	18	10¾
23	47	14	6	79	163	18	6	1	22	–	18	6¼	3	22	1	19	3¼
24	49	16	–	80	166	–	–	1	23	–	18	10¾	3	23	1	19	7¾
25	51	17	6	81	168	1	6	1	24	–	19	3	3	24	2	–	–
26	53	19	–	82	170	3	–	1	25	–	19	7½	3	25	2	–	4½
27	56	–	6	83	172	4	6	1	26	1	–	–	3	26	2	–	9
28	58	2	–	84	174	6	–	1	27	1	–	4½	3	27	2	1	1½
29	60	3	6	85	176	7	6	2	—	1	–	9					
30	62	5	–	86	178	9	–	2	1	1	1	1¼	0	1	–	–	4¼
31	64	6	6	87	180	10	6	2	2	1	1	5¾	0	2	–	–	8¾
32	66	8	–	88	182	12	–	2	3	1	1	10¼	0	3	–	1	1¼
33	68	9	6	89	184	13	6	2	4	1	2	2¾	0	4	–	1	5¾
34	70	11	–	90	186	15	–	2	5	1	2	7	0	5	–	1	10
35	72	12	6	91	188	16	6	2	6	1	2	11½	0	6	–	2	2½
36	74	14	–	92	190	18	–	2	7	1	3	4	0	7	–	2	7
37	76	15	6	93	192	19	6	2	8	1	3	8½	0	8	–	2	11½
38	78	17	–	94	195	1	–	2	9	1	4	1	0	9	–	3	4
39	80	18	6	95	197	2	6	2	10	1	4	5¼	0	10	–	3	8¼
40	83	–	–	96	199	4	–	2	11	1	4	9¾	0	11	–	4	–¾
41	85	1	6	97	201	5	6	2	12	1	5	2¼	0	12	–	4	5¼
42	87	3	–	98	203	7	–	2	13	1	5	6¾	0	13	–	4	9¾
43	89	4	6	99	205	8	6	2	14	1	5	11¼	0	14	–	5	2¼
44	91	6	–	100	207	10	–	2	15	1	6	3½	0	15	–	5	6½
45	93	7	6	200	415	–	–	2	16	1	6	8	0	16	–	5	11
46	95	9	–	300	622	10	–	2	17	1	7	–½	0	17	–	6	3½
47	97	10	6	400	830	–	–	2	18	1	7	5	0	18	–	6	8
48	99	12	–	500	1037	10	–	2	19	1	7	9¼	0	19	–	7	–¼
49	101	13	6	600	1245	–	–	2	20	1	8	1¾	0	20	–	7	4¾
50	103	15	–	700	1452	10	–	2	21	1	8	6¼	0	21	–	7	9¼
51	105	16	6	800	1660	–	–	2	22	1	8	10¾	0	22	–	8	1¾
52	107	18	–	900	1867	10	–	2	23	1	9	3¼	0	23	–	8	6¼
53	109	19	6	1000	2075	–	–	2	24	1	9	7½	0	24	–	8	10½
54	112	1	–	2000	4150	–	–	2	25	1	10	–	0	25	–	9	3
55	114	2	6	3000	6225	–	–	2	26	1	10	4½	0	26	–	9	7½
56	116	4	–	4000	8300	–	–	2	27	1	10	9	0	27	–	10	–

£42. per Ton. *4½d. per lb.* *42s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	2	–	57	119	14	–	1	–	–	10	6	3	–	1	11	6
2	4	4	–	58	121	16	–	1	1	–	10	10½	3	1	1	11	10½
3	6	6	–	59	123	18	–	1	2	–	11	3	3	2	1	12	3
4	8	8	–	60	126	–	–	1	3	–	11	7½	3	3	1	12	7½
5	10	10	–	61	128	2	–	1	4	–	12	–	3	4	1	13	–
6	12	12	–	62	130	4	–	1	5	–	12	4½	3	5	1	13	4½
7	14	14	–	63	132	6	–	1	6	–	12	9	3	6	1	13	9
8	16	16	–	64	134	8	–	1	7	–	13	1½	3	7	1	14	1½
9	18	18	–	65	136	10	–	1	8	–	13	6	3	8	1	14	6
10	21	–	–	66	138	12	–	1	9	–	13	10½	3	9	1	14	10½
11	23	2	–	67	140	14	–	1	10	–	14	3	3	10	1	15	3
12	25	4	–	68	142	16	–	1	11	–	14	7½	3	11	1	15	7½
13	27	6	–	69	144	18	–	1	12	–	15	–	3	12	1	16	–
14	29	8	–	70	147	–	–	1	13	–	15	4½	3	13	1	16	4½
15	31	10	–	71	149	2	–	1	14	–	15	9	3	14	1	16	9
16	33	12	–	72	151	4	–	1	15	–	16	1½	3	15	1	17	1½
17	35	14	–	73	153	6	–	1	16	–	16	6	3	16	1	17	6
18	37	16	–	74	155	8	–	1	17	–	16	10½	3	17	1	17	10½
19	39	18	–	75	157	10	–	1	18	–	17	3	3	18	1	18	3
20	42	–	–	76	159	12	–	1	19	–	17	7½	3	19	1	18	7½
21	44	2	–	77	161	14	–	1	20	–	18	–	3	20	1	19	–
22	46	4	–	78	163	16	–	1	21	–	18	4½	3	21	1	19	4½
23	48	6	–	79	165	18	–	1	22	–	18	9	3	22	1	19	9
24	50	8	–	80	168	–	–	1	23	–	19	1½	3	23	2	–	1½
25	52	10	–	81	170	2	–	1	24	–	19	6	3	24	2	–	6
26	54	12	–	82	172	4	–	1	25	–	19	10½	3	25	2	–	10½
27	56	14	–	83	174	6	–	1	26	1	–	3	3	26	2	1	3
28	58	16	–	84	176	8	–	1	27	1	–	7½	3	27	2	1	7½
29	60	18	–	85	178	10	–	2	—	1	1	–					
30	63	–	–	86	180	12	–	2	1	1	1	4½	0	1	–	–	4½
31	65	2	–	87	182	14	–	2	2	1	1	9	0	2	–	–	9
32	67	4	–	88	184	16	–	2	3	1	2	1½	0	3	–	1	1½
33	69	6	–	89	186	18	–	2	4	1	2	6	0	4	–	1	6
34	71	8	–	90	189	–	–	2	5	1	2	10½	0	5	–	1	10½
35	73	10	–	91	191	2	–	2	6	1	3	3	0	6	–	2	3
36	75	12	–	92	193	4	–	2	7	1	3	7½	0	7	–	2	7½
37	77	14	–	93	195	6	–	2	8	1	4	–	0	8	–	3	–
38	79	16	–	94	197	8	–	2	9	1	4	4½	0	9	–	3	4½
39	81	18	–	95	199	10	–	2	10	1	4	9	0	10	–	3	9
40	84	–	–	96	201	12	–	2	11	1	5	1½	0	11	–	4	1½
41	86	2	–	97	203	14	–	2	12	1	5	6	0	12	–	4	6
42	88	4	–	98	205	16	–	2	13	1	5	10½	0	13	–	4	10½
43	90	6	–	99	207	18	–	2	14	1	6	3	0	14	–	5	3
44	92	8	–	100	210	–	–	2	15	1	6	7½	0	15	–	5	7½
45	94	10	–	200	420	–	–	2	16	1	7	–	0	16	–	6	–
46	96	12	–	300	630	–	–	2	17	1	7	4½	0	17	–	6	4½
47	98	14	–	400	840	–	–	2	18	1	7	9	0	18	–	6	9
48	100	16	–	500	1050	–	–	2	19	1	8	1½	0	19	–	7	1½
49	102	18	–	600	1260	–	–	2	20	1	8	6	0	20	–	7	6
50	105	–	–	700	1470	–	–	2	21	1	8	10½	0	21	–	7	10½
51	107	2	–	800	1680	–	–	2	22	1	9	3	0	22	–	8	3
52	109	4	–	900	1890	–	–	2	23	1	9	7½	0	23	–	8	7½
53	111	6	–	1000	2100	–	–	2	24	1	10	–	0	24	–	9	–
54	113	8	–	2000	4200	–	–	2	25	1	10	4½	0	25	–	9	4½
55	115	10	–	3000	6300	–	–	2	26	1	10	9	0	26	–	9	9
56	117	12	–	4000	8400	–	–	2	27	1	11	1½	0	27	–	10	1½

44*s*. 4*d*. *per Cwt.* 4¾*d*. *per lb.* £44. 6*s*. 8*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	4	4	57	126	7	–	1	–	–	11	1	3	–	1	13	3
2	4	8	8	58	128	11	4	1	1	–	11	5¾	3	1	1	13	7¾
3	6	13	–	59	130	15	8	1	2	–	11	10½	3	2	1	14	–½
4	8	17	4	60	133	–	–	1	3	–	12	3¼	3	3	1	14	5¼
5	11	1	8	61	135	4	4	1	4	–	12	8	3	4	1	14	10
6	13	6	–	62	137	8	8	1	5	–	13	–¾	3	5	1	15	2¾
7	15	10	4	63	139	13	–	1	6	–	13	5½	3	6	1	15	7½
8	17	14	8	64	141	17	4	1	7	–	13	10¼	3	7	1	16	–¼
9	19	19	–	65	144	1	8	1	8	–	14	3	3	8	1	16	5
10	22	3	4	66	146	6	–	1	9	–	14	7¾	3	9	1	16	9¾
11	24	7	8	67	148	10	4	1	10	–	15	–½	3	10	1	17	2½
12	26	12	–	68	150	14	8	1	11	–	15	5¼	3	11	1	17	7¼
13	28	16	4	69	152	19	–	1	12	–	15	10	3	12	1	18	–
14	31	–	8	70	155	3	4	1	13	–	16	2¾	3	13	1	18	4¾
15	33	5	–	71	157	7	8	1	14	–	16	7½	3	14	1	18	9½
16	35	9	4	72	159	12	–	1	15	–	17	–¼	3	15	1	19	2¼
17	37	13	8	73	161	16	4	1	16	–	17	5	3	16	1	19	7
18	39	18	–	74	164	–	8	1	17	–	17	9¾	3	17	1	19	11¾
19	42	2	4	75	166	5	–	1	18	–	18	2½	3	18	2	–	4½
20	44	6	8	76	168	9	4	1	19	–	18	7¼	3	19	2	–	9¼
21	46	11	–	77	170	13	8	1	20	–	19	–	3	20	2	1	2
22	48	15	4	78	172	18	–	1	21	–	19	4¾	3	21	2	1	6¾
23	50	19	8	79	175	2	4	1	22	–	19	9½	3	22	2	1	11½
24	53	4	–	80	177	6	8	1	23	1	–	2¼	3	23	2	2	4¼
25	55	8	4	81	179	11	–	1	24	1	–	7	3	24	2	2	9
26	57	12	8	82	181	15	4	1	25	1	–	11¾	3	25	2	3	1¾
27	59	17	–	83	183	19	8	1	26	1	1	4½	3	26	2	3	6½
28	62	1	4	84	186	4	–	1	27	1	1	9¼	3	27	2	3	11¼
29	64	5	8	85	188	8	4	2	—	1	2	2					
30	66	10	–	86	190	12	8	2	1	1	2	6¾	0	1	–	–	4¾
31	68	14	4	87	192	17	–	2	2	1	2	11½	0	2	–	–	9½
32	70	18	8	88	195	1	4	2	3	1	3	4¼	0	3	–	1	2¼
33	73	3	–	89	197	5	8	2	4	1	3	9	0	4	–	1	7
34	75	7	4	90	199	10	–	2	5	1	4	1¾	0	5	–	1	11¾
35	77	11	8	91	201	14	4	2	6	1	4	6½	0	6	–	2	4½
36	79	16	–	92	203	18	8	2	7	1	4	11¼	0	7	–	2	9¼
37	82	–	4	93	206	3	–	2	8	1	5	4	0	8	–	3	2
38	84	4	8	94	208	7	4	2	9	1	5	8¾	0	9	–	3	6¾
39	86	9	–	95	210	11	8	2	10	1	6	1½	0	10	–	3	11½
40	88	13	4	96	212	16	–	2	11	1	6	6¼	0	11	–	4	4¼
41	90	17	8	97	215	–	4	2	12	1	6	11	0	12	–	4	9
42	93	2	–	98	217	4	8	2	13	1	7	3¾	0	13	–	5	1¾
43	95	6	4	99	219	9	–	2	14	1	7	8½	0	14	–	5	6½
44	97	10	8	100	221	13	4	2	15	1	8	1¼	0	15	–	5	11¼
45	99	15	–	200	443	6	8	2	16	1	8	6	0	16	–	6	4
46	101	19	4	300	665	–	–	2	17	1	8	10¾	0	17	–	6	8¾
47	104	3	8	400	886	13	4	2	18	1	9	3½	0	18	–	7	1½
48	106	8	–	500	1108	6	8	2	19	1	9	8¼	0	19	–	7	6¼
49	108	12	4	600	1330	–	–	2	20	1	10	1	0	20	–	7	11
50	110	16	8	700	1551	13	4	2	21	1	10	5¾	0	21	–	8	3¾
51	113	1	–	800	1773	6	8	2	22	1	10	10½	0	22	–	8	8½
52	115	5	4	900	1995	–	–	2	23	1	11	3¼	0	23	–	9	1¼
53	117	9	8	1000	2216	13	4	2	24	1	11	8	0	24	–	9	6
54	119	14	–	2000	4433	6	8	2	25	1	12	–¾	0	25	–	9	10¾
55	121	18	4	3000	6650	–	–	2	26	1	12	5½	0	26	–	10	3½
56	124	2	8	4000	8866	13	4	2	27	1	12	10¼	0	27	–	10	8¼

£45. per Ton.

45s. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	5	-	57	128	5	-	1	-	-	11	3	3	-	1	13	9
2	4	10	-	58	130	10	-	1	1	-	11	7¾	3	1	1	14	1¾
3	6	15	-	59	132	15	-	1	2	-	12	-½	3	2	1	14	6½
4	9	-	-	60	135	-	-	1	3	-	12	5¼	3	3	1	14	11¼
5	11	5	-	61	137	5	-	1	4	-	12	10¼	3	4	1	15	4¼
6	13	10	-	62	139	10	-	1	5	-	13	3	3	5	1	15	9
7	15	15	-	63	141	15	-	1	6	-	13	7¾	3	6	1	16	1¾
8	18	-	-	64	144	-	-	1	7	-	14	-¾	3	7	1	16	6¾
9	20	5	-	65	146	5	-	1	8	-	14	5½	3	8	1	16	11½
10	22	10	-	66	148	10	-	1	9	-	14	10¼	3	9	1	17	4¼
11	24	15	-	67	150	15	-	1	10	-	15	3	3	10	1	17	9
12	27	-	-	68	153	-	-	1	11	-	15	8	3	11	1	18	2
13	29	5	-	69	155	5	-	1	12	-	16	-¾	3	12	1	18	6¾
14	31	10	-	70	157	10	-	1	13	-	16	5½	3	13	1	18	11½
15	33	15	-	71	159	15	-	1	14	-	16	10½	3	14	1	19	4½
16	36	-	-	72	162	-	-	1	15	-	17	3¼	3	15	1	19	9¼
17	38	5	-	73	164	5	-	1	16	-	17	8	3	16	2	-	2
18	40	10	-	74	166	10	-	1	17	-	18	-¾	3	17	2	-	6¾
19	42	15	-	75	168	15	-	1	18	-	18	5¾	3	18	2	-	11¾
20	45	-	-	76	171	-	-	1	19	-	18	10½	3	19	2	1	4½
21	47	5	-	77	173	5	-	1	20	-	19	3¼	3	20	2	1	9¼
22	49	10	-	78	175	10	-	1	21	-	19	8¼	3	21	2	2	2¼
23	51	15	-	79	177	15	-	1	22	1	-	1	3	22	2	2	7
24	54	-	-	80	180	-	-	1	23	1	-	5¾	3	23	2	2	11¾
25	56	5	-	81	182	5	-	1	24	1	-	10½	3	24	2	3	4½
26	58	10	-	82	184	10	-	1	25	1	1	3½	3	25	2	3	9½
27	60	15	-	83	186	15	-	1	26	1	1	8¼	3	26	2	4	2¼
28	63	-	-	84	189	-	-	1	27	1	2	1	3	27	2	4	7
29	65	5	-	85	191	5	-	2	—	1	2	6					
30	67	10	-	86	193	10	-	2	1	1	2	10¾	0	1	-	-	4¾
31	69	15	-	87	195	15	-	2	2	1	3	3½	0	2	-	-	9½
32	72	-	-	88	198	-	-	2	3	1	3	8¼	0	3	-	1	2¼
33	74	5	-	89	200	5	-	2	4	1	4	1¼	0	4	-	1	7¼
34	76	10	-	90	202	10	-	2	5	1	4	6	0	5	-	2	-
35	78	15	-	91	204	15	-	2	6	1	4	10¾	0	6	-	2	4¾
36	81	-	-	92	207	-	-	2	7	1	5	3¾	0	7	-	2	9¾
37	83	5	-	93	209	5	-	2	8	1	5	8½	0	8	-	3	2½
38	85	10	-	94	211	10	-	2	9	1	6	1¼	0	9	-	3	7¼
39	87	15	-	95	213	15	-	2	10	1	6	6	0	10	-	4	-
40	90	-	-	96	216	-	-	2	11	1	6	11	0	11	-	4	5
41	92	5	-	97	218	5	-	2	12	1	7	3¾	0	12	-	4	9¾
42	94	10	-	98	220	10	-	2	13	1	7	8½	0	13	-	5	2½
43	96	15	-	99	222	15	-	2	14	1	8	1½	0	14	-	5	7½
44	99	-	-	100	225	-	-	2	15	1	8	6¼	0	15	-	6	-¼
45	101	5	-	200	450	-	-	2	16	1	8	11	0	16	-	6	5
46	103	10	-	300	675	-	-	2	17	1	9	3¾	0	17	-	6	9¾
47	105	15	-	400	900	-	-	2	18	1	9	8¾	0	18	-	7	2¾
48	108	-	-	500	1125	-	-	2	19	1	10	1½	0	19	-	7	7½
49	110	5	-	600	1350	-	-	2	20	1	10	6¼	0	20	-	8	-¼
50	112	10	-	700	1575	-	-	2	21	1	10	11¼	0	21	-	8	5¼
51	114	15	-	800	1800	-	-	2	22	1	11	4	0	22	-	8	10
52	117	-	-	900	2025	-	-	2	23	1	11	8¾	0	23	-	9	2¾
53	119	5	-	1000	2250	-	-	2	24	1	12	1½	0	24	-	9	7½
54	121	10	-	2000	4500	-	-	2	25	1	12	6½	0	25	-	10	-½
55	123	15	-	3000	6750	-	-	2	26	1	12	11¼	0	26	-	10	5¼
56	126	-	-	4000	9000	-	-	2	27	1	13	4	0	27	-	10	10

45*s*. 6*d*. *per Cwt*.

£45. 10*s*. *per* Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	℔.	£.	s.	d.	qr.	℔.	£.	s.	d.
1	2	5	6	57	129	13	6	1	–	–	11	4½	3	–	1	14	1½
2	4	11	–	58	131	19	–	1	1	–	11	9¼	3	1	1	14	6¼
3	6	16	6	59	134	4	6	1	2	–	12	2¼	3	2	1	14	11¼
4	9	2	–	60	136	10	–	1	3	–	12	7	3	3	1	15	4
5	11	7	6	61	138	15	6	1	4	–	13	–	3	4	1	15	9
6	13	13	–	62	141	1	–	1	5	–	13	4¾	3	5	1	16	1¾
7	15	18	6	63	143	6	6	1	6	–	13	9¾	3	6	1	16	6¾
8	18	4	–	64	145	12	–	1	7	–	14	2½	3	7	1	16	11½
9	20	9	6	65	147	17	6	1	8	–	14	7½	3	8	1	17	4½
10	22	15	–	66	150	3	–	1	9	–	15	–¼	3	9	1	17	9¼
11	25	–	6	67	152	8	6	1	10	–	15	5¼	3	10	1	18	2¼
12	27	6	–	68	154	14	–	1	11	–	15	10	3	11	1	18	7
13	29	11	6	69	156	19	6	1	12	–	16	3	3	12	1	19	–
14	31	17	–	70	159	5	–	1	13	–	16	7¾	3	13	1	19	4¾
15	34	2	6	71	161	10	6	1	14	–	17	–¾	3	14	1	19	9¾
16	36	8	–	72	163	16	–	1	15	–	17	5½	3	15	2	–	2½
17	38	13	6	73	166	1	6	1	16	–	17	10½	3	16	2	–	7½
18	40	19	–	74	168	7	–	1	17	–	18	3¼	3	17	2	1	–¼
19	43	4	6	75	170	12	6	1	18	–	18	8¼	3	18	2	1	5¼
20	45	10	–	76	172	18	–	1	19	–	19	1	3	19	2	1	10
21	47	15	6	77	175	3	6	1	20	–	19	6	3	20	2	2	3
22	50	1	–	78	177	9	–	1	21	–	19	10¾	3	21	2	2	7¾
23	52	6	6	79	179	14	6	1	22	1	–	3¾	3	22	2	3	–¾
24	54	12	–	80	182	–	–	1	23	1	–	8½	3	23	2	3	5½
25	56	17	6	81	184	5	6	1	24	1	1	1½	3	24	2	3	10½
26	59	3	–	82	186	11	–	1	25	1	1	6¼	3	25	2	4	3¼
27	61	8	6	83	188	16	6	1	26	1	1	11¼	3	26	2	4	8¼
28	63	14	–	84	191	2	–	1	27	1	2	4	3	27	2	5	1
29	65	19	6	85	193	7	6	2	—	1	2	9					
30	68	5	–	86	195	13	–	2	1	1	3	1¾	0	1	–	–	4¾
31	70	10	6	87	197	18	6	2	2	1	3	6¾	0	2	–	–	9¾
32	72	16	–	88	200	4	–	2	3	1	3	11½	0	3	–	1	2½
33	75	1	6	89	202	9	6	2	4	1	4	4½	0	4	–	1	7½
34	77	7	–	90	204	15	–	2	5	1	4	9¼	0	5	–	2	–¼
35	79	12	6	91	207	–	6	2	6	1	5	2¼	0	6	–	2	5¼
36	81	18	–	92	209	6	–	2	7	1	5	7	0	7	–	2	10
37	84	3	6	93	211	11	6	2	8	1	6	–	0	8	–	3	3
38	86	9	–	94	213	17	–	2	9	1	6	4¾	0	9	–	3	7¾
39	88	14	6	95	216	2	6	2	10	1	6	9¾	0	10	–	4	–¾
40	91	–	–	96	218	8	–	2	11	1	7	2½	0	11	–	4	5½
41	93	5	6	97	220	13	6	2	12	1	7	7½	0	12	–	4	10½
42	95	11	–	98	222	19	–	2	13	1	8	–¼	0	13	–	5	3¼
43	97	16	6	99	225	4	6	2	14	1	8	5¼	0	14	–	5	8¼
44	100	2	–	100	227	10	–	2	15	1	8	10	0	15	–	6	1
45	102	7	6	200	455	–	–	2	16	1	9	3	0	16	–	6	6
46	104	13	–	300	682	10	–	2	17	1	9	7¾	0	17	–	6	10¾
47	106	18	6	400	910	–	–	2	18	1	10	–¾	0	18	–	7	3¾
48	109	4	–	500	1137	10	–	2	19	1	10	5½	0	19	–	7	8½
49	111	9	6	600	1365	–	–	2	20	1	10	10½	0	20	–	8	1½
50	113	15	–	700	1592	10	–	2	21	1	11	3¼	0	21	–	8	6¼
51	116	–	6	800	1820	–	–	2	22	1	11	8¼	0	22	–	8	11¼
52	118	6	–	900	2047	10	–	2	23	1	12	1	0	23	–	9	4
53	120	11	6	1000	2275	–	–	2	24	1	12	6	0	24	–	9	9
54	122	17	–	2000	4550	–	–	2	25	1	12	10¾	0	25	–	10	1¾
55	125	2	6	3000	6825	–	–	2	26	1	13	3¾	0	26	–	10	6¾
6	127	8	–	4000	9100	–	–	2	27	1	13	8½	0	27	–	10	11½

£46. 13s. 4d. per Ton. **5d. *per lb.*** **46s. 8d. *per Cwt.***

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	6	8	57	133	–	–	1	–	–	11	8	3	–	1	15	–
2	4	13	4	58	135	6	8	1	1	–	12	1	3	1	1	15	5
3	7	–	–	59	137	13	4	1	2	–	12	6	3	2	1	15	10
4	9	6	8	60	140	–	–	1	3	–	12	11	3	3	1	16	3
5	11	13	4	61	142	6	8	1	4	–	13	4	3	4	1	16	8
6	14	–	–	62	144	13	4	1	5	–	13	9	3	5	1	17	1
7	16	6	8	63	147	–	–	1	6	–	14	2	3	6	1	17	6
8	18	13	4	64	149	6	8	1	7	–	14	7	3	7	1	17	11
9	21	–	–	65	151	13	4	1	8	–	15	–	3	8	1	18	4
10	23	6	8	66	154	–	–	1	9	–	15	5	3	9	1	18	9
11	25	13	4	67	156	6	8	1	10	–	15	10	3	10	1	19	2
12	28	–	–	68	158	13	4	1	11	–	16	3	3	11	1	19	7
13	30	6	8	69	161	–	–	1	12	–	16	8	3	12	2	–	–
14	32	13	4	70	163	6	8	1	13	–	17	1	3	13	2	–	5
15	35	–	–	71	165	13	4	1	14	–	17	6	3	14	2	–	10
16	37	6	8	72	168	–	–	1	15	–	17	11	3	15	2	1	3
17	39	13	4	73	170	6	8	1	16	–	18	4	3	16	2	1	8
18	42	–	–	74	172	13	4	1	17	–	18	9	3	17	2	2	1
19	44	6	8	75	175	–	–	1	18	–	19	2	3	18	2	2	6
20	46	13	4	76	177	6	8	1	19	–	19	7	3	19	2	2	11
21	49	–	–	77	179	13	4	1	20	1	–	–	3	20	2	3	4
22	51	6	8	78	182	–	–	1	21	1	–	5	3	21	2	3	9
23	53	13	4	79	184	6	8	1	22	1	–	10	3	22	2	4	2
24	56	–	–	80	186	13	4	1	23	1	1	3	3	23	2	4	7
25	58	6	8	81	189	–	–	1	24	1	1	8	3	24	2	5	–
26	60	13	4	82	191	6	8	1	25	1	2	1	3	25	2	5	5
27	63	–	–	83	193	13	4	1	26	1	2	6	3	26	2	5	10
28	65	6	8	84	196	–	–	1	27	1	2	11	3	27	2	6	3
29	67	13	4	85	198	6	8	2	—	1	3	4					
30	70	–	–	86	200	13	4	2	1	1	3	9	0	1	–	–	5
31	72	6	8	87	203	–	–	2	2	1	4	2	0	2	–	–	10
32	74	13	4	88	205	6	8	2	3	1	4	7	0	3	–	1	3
33	77	–	–	89	207	13	4	2	4	1	5	–	0	4	–	1	8
34	79	6	8	90	210	–	–	2	5	1	5	5	0	5	–	2	1
35	81	13	4	91	212	6	8	2	6	1	5	10	0	6	–	2	6
36	84	–	–	92	214	13	4	2	7	1	6	3	0	7	–	2	11
37	86	6	8	93	217	–	–	2	8	1	6	8	0	8	–	3	4
38	88	13	4	94	219	6	8	2	9	1	7	1	0	9	–	3	9
39	91	–	–	95	221	13	4	2	10	1	7	6	0	10	–	4	2
40	93	6	8	96	224	–	–	2	11	1	7	11	0	11	–	4	7
41	95	13	4	97	226	6	8	2	12	1	8	4	0	12	–	5	–
42	98	–	–	98	228	13	4	2	13	1	8	9	0	13	–	5	5
43	100	6	8	99	231	–	–	2	14	1	9	2	0	14	–	5	10
44	102	13	4	100	233	6	8	2	15	1	9	7	0	15	–	6	3
45	105	–	–	200	466	13	4	2	16	1	10	–	0	16	–	6	8
46	107	6	8	300	700	–	–	2	17	1	10	5	0	17	–	7	1
47	109	13	4	400	933	6	8	2	18	1	10	10	0	18	–	7	6
48	112	–	–	500	1166	13	4	2	19	1	11	3	0	19	–	7	11
49	114	6	8	600	1400	–	–	2	20	1	11	8	0	20	–	8	4
50	116	13	4	700	1633	6	8	2	21	1	12	1	0	21	–	8	9
51	119	–	–	800	1866	13	4	2	22	1	12	6	0	22	–	9	2
52	121	6	8	900	2100	–	–	2	23	1	12	11	0	23	–	9	7
53	123	13	4	1000	2333	6	8	2	24	1	13	4	0	24	–	10	–
54	126	–	–	2000	4666	13	4	2	25	1	13	9	0	25	–	10	5
55	128	6	8	3000	7000	–	–	2	26	1	14	2	0	26	–	10	10
56	130	13	4	4000	9333	6	8	2	27	1	14	7	0	27	–	11	

53*s*. 8*d*. *per Cwt.* 5¾*d*. *per lb.* £53. 13*s*. 4*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	13	8	57	152	19	–	1	–	–	13	5	3	–	2	–	3
2	5	7	4	58	155	12	8	1	1	–	13	10¾	3	1	2	–	8¾
3	8	1	–	59	158	6	4	1	2	–	14	4½	3	2	2	1	2½
4	10	14	8	60	161	–	–	1	3	–	14	10¼	3	3	2	1	8¼
5	13	8	4	61	163	13	8	1	4	–	15	4	3	4	2	2	2
6	16	2	–	62	166	7	4	1	5	–	15	9¾	3	5	2	2	7¾
7	18	15	8	63	169	1	–	1	6	–	16	3½	3	6	2	3	1½
8	21	9	4	64	171	14	8	1	7	–	16	9¼	3	7	2	3	7¼
9	24	3	–	65	174	8	4	1	8	–	17	3	3	8	2	4	1
10	26	16	8	66	177	2	–	1	9	–	17	8¾	3	9	2	4	6¾
11	29	10	4	67	179	15	8	1	10	–	18	2½	3	10	2	5	–½
12	32	4	–	68	182	9	4	1	11	–	18	8¼	3	11	2	5	6¼
13	34	17	8	69	185	3	–	1	12	–	19	2	3	12	2	6	–
14	37	11	4	70	187	16	8	1	13	–	19	7¾	3	13	2	6	5¾
15	40	5	–	71	190	10	4	1	14	1	–	1½	3	14	2	6	11½
16	42	18	8	72	193	4	–	1	15	1	–	7¼	3	15	2	7	5¼
17	45	12	4	73	195	17	8	1	16	1	1	1	3	16	2	7	11
18	48	6	–	74	198	11	4	1	17	1	1	6¾	3	17	2	8	5¾
19	50	19	8	75	201	5	–	1	18	1	2	–½	3	18	2	8	10½
20	53	13	4	76	203	18	8	1	19	1	2	6¼	3	19	2	9	4¼
21	56	7	–	77	206	12	4	1	20	1	3	–	3	20	2	9	10
22	59	–	8	78	209	6	–	1	21	1	3	5¾	3	21	2	10	3¾
23	61	14	4	79	211	19	8	1	22	1	3	11½	3	22	2	10	9½
24	64	8	–	80	214	13	4	1	23	1	4	5¼	3	23	2	11	3¼
25	67	1	8	81	217	7	–	1	24	1	4	11	3	24	2	11	9
26	69	15	4	82	220	–	8	1	25	1	5	4¾	3	25	2	12	2¾
27	72	9	–	83	222	14	4	1	26	1	5	10½	3	26	2	12	8½
28	75	2	8	84	225	8	–	1	27	1	6	4¼	3	27	2	13	2¼
29	77	16	4	85	228	1	8	2	—	1	6	10					
30	80	10	–	86	230	15	4	2	1	1	7	3¾	0	1	–	–	5¾
31	83	3	8	87	233	9	–	2	2	1	7	9½	0	2	–	–	11½
32	85	17	4	88	236	2	8	2	3	1	8	3¼	0	3	–	1	5¼
33	88	11	–	89	238	16	4	2	4	1	8	9	0	4	–	1	11
34	91	4	8	90	241	10	–	2	5	1	9	2¾	0	5	–	2	4¾
35	93	18	4	91	244	3	8	2	6	1	9	8½	0	6	–	2	10½
36	96	12	–	92	246	17	4	2	7	1	10	2¼	0	7	–	3	4¼
37	99	5	8	93	249	11	–	2	8	1	10	8	0	8	–	3	10
38	101	19	4	94	252	4	8	2	9	1	11	1¾	0	9	–	4	3¾
39	104	13	–	95	254	18	4	2	10	1	11	7½	0	10	–	4	9½
40	107	6	8	96	257	12	–	2	11	1	12	1¼	0	11	–	5	3¼
41	110	–	4	97	260	5	8	2	12	1	12	7	0	12	–	5	9
42	112	14	–	98	262	19	4	2	13	1	13	–¾	0	13	–	6	2¾
43	115	7	8	99	265	13	–	2	14	1	13	6½	0	14	–	6	8½
44	118	1	4	100	268	6	8	2	15	1	14	–¼	0	15	–	7	2¼
45	120	15	–	200	536	13	4	2	16	1	14	6	0	16	–	7	8
46	123	8	8	300	805	–	–	2	17	1	14	11¾	0	17	–	8	1¾
47	126	2	4	400	1073	6	8	2	18	1	15	5½	0	18	–	8	7½
48	128	16	–	500	1341	13	4	2	19	1	15	11¼	0	19	–	9	1¼
49	131	9	8	600	1610	–	–	2	20	1	16	5	0	20	–	9	7
50	134	3	4	700	1878	6	8	2	21	1	16	10¾	0	21	–	10	–¾
51	136	17	–	800	2146	13	4	2	22	1	17	4½	0	22	–	10	6½
52	139	10	8	900	2415	–	–	2	23	1	17	10¼	0	23	–	11	–¼
53	142	4	4	1000	2683	6	8	2	24	1	18	4	0	24	–	11	6
54	144	18	–	2000	5366	13	4	2	25	1	18	9¾	0	25	–	11	11¾
55	147	11	8	3000	8050	–	–	2	26	1	19	3½	0	26	–	12	5½
56	150	5	4	4000	10,783	6	8	2	27	1	19	9¼	0	27	–	12	11¼

£56. *per Ton.* 6*d. per lb.* 56*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	16	-	57	159	12	-	1	-	-	14	-	3	-	2	2	-
2	5	12	-	58	162	8	-	1	1	-	14	6	3	1	2	2	6
3	8	8	-	59	165	4	-	1	2	-	15	-	3	2	2	3	-
4	11	4	-	60	168	-	-	1	3	-	15	6	3	3	2	3	6
5	14	-	-	61	170	16	-	1	4	-	16	-	3	4	2	4	-
6	16	16	-	62	173	12	-	1	5	-	16	6	3	5	2	4	6
7	19	12	-	63	176	8	-	1	6	-	17	-	3	6	2	5	-
8	22	8	-	64	179	4	-	1	7	-	17	6	3	7	2	5	6
9	25	4	-	65	182	-	-	1	8	-	18	-	3	8	2	6	-
10	28	-	-	66	184	16	-	1	9	-	18	6	3	9	2	6	6
11	30	16	-	67	187	12	-	1	10	-	19	-	3	10	2	7	-
12	33	12	-	68	190	8	-	1	11	-	19	6	3	11	2	7	6
13	36	8	-	69	193	4	-	1	12	1	-	-	3	12	2	8	-
14	39	4	-	70	196	-	-	1	13	1	-	6	3	13	2	8	6
15	42	-	-	71	198	16	-	1	14	1	1	-	3	14	2	9	-
16	44	16	-	72	201	12	-	1	15	1	1	6	3	15	2	9	6
17	47	12	-	73	204	8	-	1	16	1	2	-	3	16	2	10	-
18	50	8	-	74	207	4	-	1	17	1	2	6	3	17	2	10	6
19	53	4	-	75	210	-	-	1	18	1	3	-	3	18	2	11	-
20	56	-	-	76	212	16	-	1	19	1	3	6	3	19	2	11	6
21	58	16	-	77	215	12	-	1	20	1	4	-	3	20	2	12	-
22	61	12	-	78	218	8	-	1	21	1	4	6	3	21	2	12	6
23	64	8	-	79	221	4	-	1	22	1	5	-	3	22	2	13	-
24	67	4	-	80	224	-	-	1	23	1	5	6	3	23	2	13	6
25	70	-	-	81	226	16	-	1	24	1	6	-	3	24	2	14	-
26	72	16	-	82	229	12	-	1	25	1	6	6	3	25	2	14	6
27	75	12	-	83	232	8	-	1	26	1	7	-	3	26	2	15	-
28	78	8	-	84	235	4	-	1	27	1	7	6	3	27	2	15	6
29	81	4	-	85	238	-	-	2	—	1	8	-					
30	84	-	-	86	240	16	-	2	1	1	8	6	0	1	-	-	6
31	86	16	-	87	243	12	-	2	2	1	9	-	0	2	-	1	-
32	89	12	-	88	246	8	-	2	3	1	9	6	0	3	-	1	6
33	92	8	-	89	249	4	-	2	4	1	10	-	0	4	-	2	-
34	95	4	-	90	252	-	-	2	5	1	10	6	0	5	-	2	6
35	98	-	-	91	254	16	-	2	6	1	11	-	0	6	-	3	-
36	100	16	-	92	257	12	-	2	7	1	11	6	0	7	-	3	6
37	103	12	-	93	260	8	-	2	8	1	12	-	0	8	-	4	-
38	106	8	-	94	263	4	-	2	9	1	12	6	0	9	-	4	6
39	109	4	-	95	266	-	-	2	10	1	13	-	0	10	-	5	-
40	112	-	-	96	268	16	-	2	11	1	13	6	0	11	-	5	6
41	114	16	-	97	271	12	-	2	12	1	14	-	0	12	-	6	-
42	117	12	-	98	274	8	-	2	13	1	14	6	0	13	-	6	6
43	120	8	-	99	277	4	-	2	14	1	15	-	0	14	-	7	-
44	123	4	-	100	280	-	-	2	15	1	15	6	0	15	-	7	6
45	126	-	-	200	560	-	-	2	16	1	16	-	0	16	-	8	-
46	128	16	-	300	840	-	-	2	17	1	16	6	0	17	-	8	6
47	131	12	-	400	1120	-	-	2	18	1	17	-	0	18	-	9	-
48	134	8	-	500	1400	-	-	2	19	1	17	6	0	19	-	9	6
49	137	4	-	600	1680	-	-	2	20	1	18	-	0	20	-	10	-
50	140	-	-	700	1960	-	-	2	21	1	18	6	0	21	-	10	6
51	142	16	-	800	2240	-	-	2	22	1	19	-	0	22	-	11	-
52	145	12	-	900	2520	-	-	2	23	1	19	6	0	23	-	11	6
53	148	8	-	1000	2800	-	-	2	24	2	-	-	0	24	-	12	-
54	151	4	-	2000	5600	-	-	2	25	2	-	6	0	25	-	12	6
55	154	-	-	3000	8400	-	-	2	26	2	1	-	0	26	-	13	-
56	156	16	-	4000	11,200	-	-	2	27	2	1	6	0	27	-	13	6

58s. 4d. per Cwt. *6¼d. per lb.* £58. 6s. 8d. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	2	18	4	57	166	5	–	1	–	–	14	7	3	–	2	3	9
2	5	16	8	58	169	3	4	1	1	–	15	1¼	3	1	2	4	3¼
3	8	15	–	59	172	1	8	1	2	–	15	7½	3	2	2	4	9½
4	11	13	4	60	175	–	–	1	3	–	16	1¾	3	3	2	5	3¾
5	14	11	8	61	177	18	4	1	4	–	16	8	3	4	2	5	10
6	17	10	–	62	180	16	8	1	5	–	17	2¼	3	5	2	6	4¼
7	20	8	4	63	183	15	–	1	6	–	17	8½	3	6	2	6	10½
8	23	6	8	64	186	13	4	1	7	–	18	2¾	3	7	2	7	4¾
9	26	5	–	65	189	11	8	1	8	–	18	9	3	8	2	7	11
10	29	3	4	66	192	10	–	1	9	–	19	3¼	3	9	2	8	5¼
11	32	1	8	67	195	8	4	1	10	–	19	9½	3	10	2	8	11½
12	35	–	–	68	198	6	8	1	11	1	–	3¾	3	11	2	9	5¾
13	37	18	4	69	201	5	–	1	12	1	–	10	3	12	2	10	–
14	40	16	8	70	204	3	4	1	13	1	1	4¼	3	13	2	10	6¼
15	43	15	–	71	207	1	8	1	14	1	1	10½	3	14	2	11	–½
16	46	13	4	72	210	–	–	1	15	1	2	4¾	3	15	2	11	6¾
17	49	11	8	73	212	18	4	1	16	1	2	11	3	16	2	12	1
18	52	10	–	74	215	16	8	1	17	1	3	5¼	3	17	2	12	7¼
19	55	8	4	75	218	15	–	1	18	1	3	11½	3	18	2	13	1½
20	58	6	8	76	221	13	4	1	19	1	4	5¾	3	19	2	13	7¾
21	61	5	–	77	224	11	8	1	20	1	5	–	3	20	2	14	2
22	64	3	4	78	227	10	–	1	21	1	5	6¼	3	21	2	14	8¼
23	67	1	8	79	230	8	4	1	22	1	6	–½	3	22	2	15	2½
24	70	–	–	80	233	6	8	1	23	1	6	6¾	3	23	2	15	8¾
25	72	18	4	81	236	5	–	1	24	1	7	1	3	24	2	16	3
26	75	16	8	82	239	3	4	1	25	1	7	7¼	3	25	2	16	9¼
27	78	15	–	83	242	1	8	1	26	1	8	1½	3	26	2	17	3½
28	81	13	4	84	245	–	–	1	27	1	8	7¾	3	27	2	17	9¾
29	84	11	8	85	247	18	4	2	—	1	9	2					
30	87	10	–	86	250	16	8	2	1	1	9	8¼	0	1	–	–	6¼
31	90	8	4	87	253	15	–	2	2	1	10	2½	0	2	–	1	–½
32	93	6	8	88	256	13	4	2	3	1	10	8¾	0	3	–	1	6¾
33	96	5	–	89	259	11	8	2	4	1	11	3	0	4	–	2	1
34	99	3	4	90	262	10	–	2	5	1	11	9¼	0	5	–	2	7¼
35	102	1	8	91	265	8	4	2	6	1	12	3½	0	6	–	3	1½
36	105	–	–	92	268	6	8	2	7	1	12	9¾	0	7	–	3	7¾
37	107	18	4	93	271	5	–	2	8	1	13	4	0	8	–	4	2
38	110	16	8	94	274	3	4	2	9	1	13	10¼	0	9	–	4	8¼
39	113	15	–	95	277	1	8	2	10	1	14	4½	0	10	–	5	2½
40	116	13	4	96	280	–	–	2	11	1	14	10¾	0	11	–	5	8¾
41	119	11	8	97	282	18	4	2	12	1	15	5	0	12	–	6	3
42	122	10	–	98	285	16	8	2	13	1	15	11¼	0	13	–	6	9¼
43	125	8	4	99	288	15	–	2	14	1	16	5½	0	14	–	7	3½
44	128	6	8	100	291	13	4	2	15	1	16	11¾	0	15	–	7	9¾
45	131	5	–	200	583	6	8	2	16	1	17	6	0	16	–	8	4
46	134	3	4	300	875	–	–	2	17	1	18	–¼	0	17	–	8	10¼
47	137	1	8	400	1166	13	4	2	18	1	18	6½	0	18	–	9	4½
48	140	–	–	500	1458	6	8	2	19	1	19	–¾	0	19	–	9	10¾
49	142	18	4	600	1750	–	–	2	20	1	19	7	0	20	–	10	5
50	145	16	8	700	2041	13	4	2	21	2	–	1¼	0	21	–	10	11¼
51	148	15	–	800	2333	6	8	2	22	2	–	7½	0	22	–	11	5½
52	151	13	4	900	2625	–	–	2	23	2	1	1¾	0	23	–	11	11¾
53	154	11	8	1000	2916	13	4	2	24	2	1	8	0	24	–	12	6
54	157	10	–	2000	5833	6	8	2	25	2	2	2¼	0	25	–	13	–¼
55	160	8	4	3000	8750	–	–	2	26	2	2	8½	0	26	–	13	6½
56	163	6	8	4000	11,666	13	4	2	27	2	3	2¾	0	27	–	14	–¾

31	[illegible]	[illegible]	[illegible]	[illegible]
32	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	100
[illegible]	[illegible]	[illegible]	[illegible]	200
47	[illegible]	[illegible]	[illegible]	300
[illegible]	[illegible]	[illegible]	[illegible]	400
[illegible]	[illegible]	[illegible]	[illegible]	500
50	[illegible]	[illegible]	[illegible]	600
[illegible]	[illegible]	14	4	700
52	[illegible]	14	—	800
53	[illegible]	[illegible]	[illegible]	900
[illegible]	[illegible]	[illegible]	4	1000
55	[illegible]	16	—	2000
56	[illegible]	16	6	3000
	169	17	4	4000

63*s*. *per Cwt.* 6¾*d*. *per lb.* £63. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	3	-	57	179	11	-	1	-	-	15	9	3	-	2	7	3
2	6	6	-	58	182	14	-	1	1	-	16	3¾	3	1	2	7	9¾
3	9	9	-	59	185	17	-	1	2	-	16	10½	3	2	2	8	4½
4	12	12	-	60	189	-	-	1	3	-	17	5¼	3	3	2	8	11¼
5	15	15	-	61	192	3	-	1	4	-	18	-	3	4	2	9	6
6	18	18	-	62	195	6	-	1	5	-	18	6¾	3	5	2	10	-¾
7	22	1	-	63	198	9	-	1	6	-	19	1½	3	6	2	10	7½
8	25	4	-	64	201	12	-	1	7	-	19	8¼	3	7	2	11	2¼
9	28	7	-	65	204	15	-	1	8	1	-	3	3	8	2	11	9
10	31	10	-	66	207	18	-	1	9	1	-	9¾	3	9	2	12	3¾
11	34	13	-	67	211	1	-	1	10	1	1	4½	3	10	2	12	10½
12	37	16	-	68	214	4	-	1	11	1	1	11¼	3	11	2	13	5¼
13	40	19	-	69	217	7	-	1	12	1	2	6	3	12	2	14	-
14	44	2	-	70	220	10	-	1	13	1	3	-¾	3	13	2	14	6¾
15	47	5	-	71	223	13	-	1	14	1	3	7½	3	14	2	15	1½
16	50	8	-	72	226	16	-	1	15	1	4	2¼	3	15	2	15	8¼
17	53	11	-	73	229	19	-	1	16	1	4	9	3	16	2	16	3
18	56	14	-	74	233	2	-	1	17	1	5	3¾	3	17	2	16	9¾
19	59	17	-	75	236	5	-	1	18	1	5	10½	3	18	2	17	4½
20	63	-	-	76	239	8	-	1	19	1	6	5¼	3	19	2	17	11¼
21	66	3	-	77	242	11	-	1	20	1	7	-	3	20	2	18	6
22	69	6	-	78	245	14	-	1	21	1	7	6¾	3	21	2	19	-¾
23	72	9	-	79	248	17	-	1	22	1	8	1½	3	22	2	19	7½
24	75	12	-	80	252	-	-	1	23	1	8	8¼	3	23	3	-	2¼
25	78	15	-	81	255	3	-	1	24	1	9	3	3	24	3	-	9
26	81	18	-	82	258	6	-	1	25	1	9	9¾	3	25	3	1	3¾
27	85	1	-	83	261	9	-	1	26	1	10	4½	3	26	3	1	10½
28	88	4	-	84	264	12	-	1	27	1	10	11¼	3	27	3	2	5¼
29	91	7	-	85	267	15	-	2	—	1	11	6					
30	94	10	-	86	270	18	-	2	1	1	12	-¾	0	1	-	-	6¾
31	97	13	-	87	274	1	-	2	2	1	12	7½	0	2	-	1	1½
32	100	16	-	88	277	4	-	2	3	1	13	2¼	0	3	-	1	8¼
33	103	19	-	89	280	7	-	2	4	1	13	9	0	4	-	2	3
34	107	2	-	90	283	10	-	2	5	1	14	3¾	0	5	-	2	9¾
35	110	5	-	91	286	13	-	2	6	1	14	10½	0	6	-	3	4½
36	113	8	-	92	289	16	-	2	7	1	15	5¼	0	7	-	3	11¼
37	116	11	-	93	292	19	-	2	8	1	16	-	0	8	-	4	6
38	119	14	-	94	296	2	-	2	9	1	16	6¾	0	9	-	5	-¾
39	122	17	-	95	299	5	-	2	10	1	17	1½	0	10	-	5	7½
40	126	-	-	96	302	8	-	2	11	1	17	8¼	0	11	-	6	2¼
41	129	3	-	97	305	11	-	2	12	1	18	3	0	12	-	6	9
42	132	6	-	98	308	14	-	2	13	1	18	9¾	0	13	-	7	3¾
43	135	9	-	99	311	17	-	2	14	1	19	4½	0	14	-	7	10½
44	138	12	-	100	315	-	-	2	15	1	19	11¼	0	15	-	8	5¼
45	141	15	-	200	630	-	-	2	16	2	-	6	0	16	-	9	-
46	144	18	-	300	945	-	-	2	17	2	1	-¾	0	17	-	9	6¾
47	148	1	-	400	1260	-	-	2	18	2	1	7½	0	18	-	10	1½
48	151	4	-	500	1575	-	-	2	19	2	2	2¼	0	19	-	10	8¼
49	154	7	-	600	1890	-	-	2	20	2	2	9	0	20	-	11	3
50	157	10	-	700	2205	-	-	2	21	2	3	3¾	0	21	-	11	9¾
51	160	13	-	800	2520	-	-	2	22	2	3	10½	0	22	-	12	4½
52	163	16	-	900	2835	-	-	2	23	2	4	5¼	0	23	-	12	11¼
53	166	19	-	1000	3150	-	-	2	24	2	5	-	0	24	-	13	6
54	170	2	-	2000	6300	-	-	2	25	2	5	6¾	0	25	-	14	-¾
55	173	5	-	3000	9450	-	-	2	26	2	6	1½	0	26	-	14	7½
56	176	8	-	4000	12,600	-	-	2	27	2	6	8¼	0	27	-	15	2¼

£65. 6s. 8d. per Ton. 7d. per lb. 65s. 4d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	5	4	57	186	4	-	1	-	-	16	4	3	-	2	9	-
2	6	10	8	58	189	9	4	1	1	-	16	11	3	1	2	9	7
3	9	16	-	59	192	14	8	1	2	-	17	6	3	2	2	10	2
4	13	1	4	60	196	-	-	1	3	-	18	1	3	3	2	10	9
5	16	6	8	61	199	5	4	1	4	-	18	8	3	4	2	11	4
6	19	12	-	62	202	10	8	1	5	-	19	3	3	5	2	11	11
7	22	17	4	63	205	16	-	1	6	-	19	10	3	6	2	12	6
8	26	2	8	64	209	1	4	1	7	1	-	5	3	7	2	13	1
9	29	8	-	65	212	6	8	1	8	1	1	-	3	8	2	13	8
10	32	13	4	66	215	12	-	1	9	1	1	7	3	9	2	14	3
11	35	18	8	67	218	17	4	1	10	1	2	2	3	10	2	14	10
12	39	4	-	68	222	2	8	1	11	1	2	9	3	11	2	15	5
13	42	9	4	69	225	8	-	1	12	1	3	4	3	12	2	16	-
14	45	14	8	70	228	13	4	1	13	1	3	11	3	13	2	16	7
15	49	-	-	71	231	18	8	1	14	1	4	6	3	14	2	17	2
16	52	5	4	72	235	4	-	1	15	1	5	1	3	15	2	17	9
17	55	10	8	73	238	9	4	1	16	1	5	8	3	16	2	18	4
18	58	16	-	74	241	14	8	1	17	1	6	3	3	17	2	18	11
19	62	1	4	75	245	-	-	1	18	1	6	10	3	18	2	19	6
20	65	6	8	76	248	5	4	1	19	1	7	5	3	19	3	-	1
21	68	12	-	77	251	10	8	1	20	1	8	-	3	20	3	-	8
22	71	17	4	78	254	16	-	1	21	1	8	7	3	21	3	1	3
23	75	2	8	79	258	1	4	1	22	1	9	2	3	22	3	1	10
24	78	8	-	80	261	6	8	1	23	1	9	9	3	23	3	2	5
25	81	13	4	81	264	12	-	1	24	1	10	4	3	24	3	3	-
26	84	18	8	82	267	17	4	1	25	1	10	11	3	25	3	3	7
27	88	4	-	83	271	2	8	1	26	1	11	6	3	26	3	4	2
28	91	9	4	84	274	8	-	1	27	1	12	1	3	27	3	4	9
29	94	14	8	85	277	13	4	2	—	1	12	8					
30	98	-	-	86	280	18	8	2	1	1	13	3	0	1	-	-	7
31	101	5	4	87	284	4	-	2	2	1	13	10	0	2	-	1	2
32	104	10	8	88	287	9	4	2	3	1	14	5	0	3	-	1	9
33	107	16	-	89	290	14	8	2	4	1	15	-	0	4	-	2	4
34	111	1	4	90	294	-	-	2	5	1	15	7	0	5	-	2	11
35	114	6	8	91	297	5	4	2	6	1	16	2	0	6	-	3	6
36	117	12	-	92	300	10	8	2	7	1	16	9	0	7	-	4	1
37	120	17	4	93	303	16	-	2	8	1	17	4	0	8	-	4	8
38	124	2	8	94	307	1	4	2	9	1	17	11	0	9	-	5	3
39	127	8	-	95	310	6	8	2	10	1	18	6	0	10	-	5	10
40	130	13	4	96	313	12	-	2	11	1	19	1	0	11	-	6	5
41	133	18	8	97	316	17	4	2	12	1	19	8	0	12	-	7	-
42	137	4	-	98	320	2	8	2	13	2	-	3	0	13	-	7	7
43	140	9	4	99	323	8	-	2	14	2	-	10	0	14	-	8	2
44	143	14	8	100	326	13	4	2	15	2	1	5	0	15	-	8	9
45	147	-	-	200	653	6	8	2	16	2	2	-	0	16	-	9	4
46	150	5	4	300	980	-	-	2	17	2	2	7	0	17	-	9	11
47	153	10	8	400	1306	13	4	2	18	2	3	2	0	18	-	10	6
48	156	16	-	500	1633	6	8	2	19	2	3	9	0	19	-	11	1
49	160	1	4	600	1960	-	-	2	20	2	4	4	0	20	-	11	8
50	163	6	8	700	2286	13	4	2	21	2	4	11	0	21	-	12	3
51	166	12	-	800	2613	6	8	2	22	2	5	6	0	22	-	12	10
52	169	17	4	900	2940	-	-	2	23	2	6	1	0	23	-	13	5
53	173	2	8	1000	3266	13	4	2	24	2	6	8	0	24	-	14	-
54	176	8	-	2000	6533	6	8	2	25	2	7	3	0	25	-	14	7
55	179	13	4	3000	9800	-	-	2	26	2	7	10	0	26	-	15	2
56	182	18	8	4000	13,066	13	4	2	27	2	8	5	0	27	-	15	9

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67*s.* 8*d.* *per Cwt.* 7¼*d.* *per lb.* £67. 13*s.* 4*d.* *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	7	8	57	192	17	–	1	–	–	16	11	3	–	2	10	9
2	6	15	4	58	196	4	8	1	1	–	17	6¼	3	1	2	11	4¼
3	10	3	–	59	199	12	4	1	2	–	18	1½	3	2	2	11	11½
4	13	10	8	60	203	–	–	1	3	–	18	8¾	3	3	2	12	6¾
5	16	18	4	61	206	7	8	1	4	–	19	4	3	4	2	13	2
6	20	6	–	62	209	15	4	1	5	–	19	11¼	3	5	2	13	9¼
7	23	13	8	63	213	3	–	1	6	1	–	6½	3	6	2	14	4½
8	27	1	4	64	216	10	8	1	7	1	1	1¾	3	7	2	14	11¾
9	30	9	–	65	219	18	4	1	8	1	1	9	3	8	2	15	7
10	33	16	8	66	223	6	–	1	9	1	2	4¼	3	9	2	16	2¼
11	37	4	4	67	226	13	8	1	10	1	2	11½	3	10	2	16	9½
12	40	12	–	68	230	1	4	1	11	1	3	6¾	3	11	2	17	4¾
13	43	19	8	69	233	9	–	1	12	1	4	2	3	12	2	18	–
14	47	7	4	70	236	16	8	1	13	1	4	9¼	3	13	2	18	7¼
15	50	15	–	71	240	4	4	1	14	1	5	4½	3	14	2	19	2½
16	54	2	8	72	243	12	–	1	15	1	5	11¾	3	15	2	19	9¾
17	57	10	4	73	246	19	8	1	16	1	6	7	3	16	3	–	5
18	60	18	–	74	250	7	4	1	17	1	7	2¼	3	17	3	1	–¼
19	64	5	8	75	253	15	–	1	18	1	7	9½	3	18	3	1	7½
20	67	13	4	76	257	2	8	1	19	1	8	4¾	3	19	3	2	2¾
21	71	1	–	77	260	10	4	1	20	1	9	–	3	20	3	2	10
22	74	8	8	78	263	18	–	1	21	1	9	7¼	3	21	3	3	5¼
23	77	16	4	79	267	5	8	1	22	1	10	2½	3	22	3	4	–½
24	81	4	–	80	270	13	4	1	23	1	10	9¾	3	23	3	4	7¾
25	84	11	8	81	274	1	–	1	24	1	11	5	3	24	3	5	3
26	87	19	4	82	277	8	8	1	25	1	12	–¼	3	25	3	5	10¼
27	91	7	–	83	280	16	4	1	26	1	12	7½	3	26	3	6	5½
28	94	14	8	84	284	4	–	1	27	1	13	2¾	3	27	3	7	–¾
29	98	2	4	85	287	11	8	2	—	1	13	10					
30	101	10	–	86	290	19	4	2	1	1	14	5¼	0	1	–	–	7¼
31	104	17	8	87	294	7	–	2	2	1	15	–½	0	2	–	1	2½
32	108	5	4	88	297	14	8	2	3	1	15	7¾	0	3	–	1	9¾
33	111	13	–	89	301	2	4	2	4	1	16	3	0	4	–	2	5
34	115	–	8	90	304	10	–	2	5	1	16	10¼	0	5	–	3	–¼
35	118	8	4	91	307	17	8	2	6	1	17	5½	0	6	–	3	7½
36	121	16	–	92	311	5	4	2	7	1	18	–¾	0	7	–	4	2¾
37	125	3	8	93	314	13	–	2	8	1	18	8	0	8	–	4	10
38	128	11	4	94	318	–	8	2	9	1	19	3¼	0	9	–	5	5¼
39	131	19	–	95	321	8	4	2	10	1	19	10½	0	10	–	6	–½
40	135	6	8	96	324	16	–	2	11	2	–	5¾	0	11	–	6	7¾
41	138	14	4	97	328	3	8	2	12	2	1	1	0	12	–	7	3
42	142	2	–	98	331	11	4	2	13	2	1	8¼	0	13	–	7	10¼
43	145	9	8	99	334	19	–	2	14	2	2	3½	0	14	–	8	5½
44	148	17	4	100	338	6	8	2	15	2	2	10¾	0	15	–	9	–¾
45	152	5	–	200	676	13	4	2	16	2	3	6	0	16	–	9	8
46	155	12	8	300	1015	–	–	2	17	2	4	1¼	0	17	–	10	3¼
47	159	–	4	400	1353	6	8	2	18	2	4	8½	0	18	–	10	10½
48	162	8	–	500	1691	13	4	2	19	2	5	3¾	0	19	–	11	5¾
49	165	15	8	600	2030	–	–	2	20	2	5	11	0	20	–	12	1
50	169	3	4	700	2368	6	8	2	21	2	6	6¼	0	21	–	12	8¼
51	172	11	–	800	2706	13	4	2	22	2	7	1½	0	22	–	13	3½
52	175	18	8	900	3045	–	–	2	23	2	7	8¾	0	23	–	13	10¾
53	179	6	4	1000	3383	6	8	2	24	2	8	4	0	24	–	14	6
54	182	14	–	2000	6766	13	4	2	25	2	8	11¼	0	25	–	15	1¼
55	186	1	8	3000	10,150	–	–	2	26	2	9	6½	0	26	–	15	8½
56	189	9	4	4000	13,533	6	8	2	27	2	10	1¾	0	27	–	16	3¾

£70. per Ton. 7½*d.* per lb. 70*s.* per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	10	–	57	199	10	–	1	–	–	17	6	3	–	2	12	6
2	7	–	–	58	203	–	–	1	1	–	18	1½	3	1	2	13	1½
3	10	10	–	59	206	10	–	1	2	–	18	9	3	2	2	13	9
4	14	–	–	60	210	–	–	1	3	–	19	4½	3	3	2	14	4½
5	17	10	–	61	213	10	–	1	4	1	–	–	3	4	2	15	–
6	21	–	–	62	217	–	–	1	5	1	–	7½	3	5	2	15	7½
7	24	10	–	63	220	10	–	1	6	1	1	3	3	6	2	16	3
8	28	–	–	64	224	–	–	1	7	1	1	10½	3	7	2	16	10½
9	31	10	–	65	227	10	–	1	8	1	2	6	3	8	2	17	6
10	35	–	–	66	231	–	–	1	9	1	3	1½	3	9	2	18	1½
11	38	10	–	67	234	10	–	1	10	1	3	9	3	10	2	18	9
12	42	–	–	68	238	–	–	1	11	1	4	4½	3	11	2	19	4½
13	45	10	–	69	241	10	–	1	12	1	5	–	3	12	3	–	–
14	49	–	–	70	245	–	–	1	13	1	5	7½	3	13	3	–	7½
15	52	10	–	71	248	10	–	1	14	1	6	3	3	14	3	1	3
16	56	–	–	72	252	–	–	1	15	1	6	10½	3	15	3	1	10½
17	59	10	–	73	255	10	–	1	16	1	7	6	3	16	3	2	6
18	63	–	–	74	259	–	–	1	17	1	8	1½	3	17	3	3	1½
19	66	10	–	75	262	10	–	1	18	1	8	9	3	18	3	3	9
20	70	–	–	76	266	–	–	1	19	1	9	4½	3	19	3	4	4½
21	73	10	–	77	269	10	–	1	20	1	10	–	3	20	3	5	–
22	77	–	–	78	273	–	–	1	21	1	10	7½	3	21	3	5	7½
23	80	10	–	79	276	10	–	1	22	1	11	3	3	22	3	6	3
24	84	–	–	80	280	–	–	1	23	1	11	10½	3	23	3	6	10½
25	87	10	–	81	283	10	–	1	24	1	12	6	3	24	3	7	6
26	91	–	–	82	287	–	–	1	25	1	13	1½	3	25	3	8	1½
27	94	10	–	83	290	10	–	1	26	1	13	9	3	26	3	8	9
28	98	–	–	84	294	–	–	1	27	1	14	4½	3	27	3	9	4½
29	101	10	–	85	297	10	–	2	—	1	15	–					
30	105	–	–	86	301	–	–	2	1	1	15	7½	0	1	–	–	7½
31	108	10	–	87	304	10	–	2	2	1	16	3	0	2	–	1	3
32	112	–	–	88	308	–	–	2	3	1	16	10½	0	3	–	1	10½
33	115	10	–	89	311	10	–	2	4	1	17	6	0	4	–	2	6
34	119	–	–	90	315	–	–	2	5	1	18	1½	0	5	–	3	1½
35	122	10	–	91	318	10	–	2	6	1	18	9	0	6	–	3	9
36	126	–	–	92	322	–	–	2	7	1	19	4½	0	7	–	4	4½
37	129	10	–	93	325	10	–	2	8	2	–	–	0	8	–	5	–
38	133	–	–	94	329	–	–	2	9	2	–	7½	0	9	–	5	7½
39	136	10	–	95	332	10	–	2	10	2	1	3	0	10	–	6	3
40	140	–	–	96	336	–	–	2	11	2	1	10½	0	11	–	6	10½
41	143	10	–	97	339	10	–	2	12	2	2	6	0	12	–	7	6
42	147	–	–	98	343	–	–	2	13	2	3	1½	0	13	–	8	1½
43	150	10	–	99	346	10	–	2	14	2	3	9	0	14	–	8	9
44	154	–	–	100	350	–	–	2	15	2	4	4½	0	15	–	9	4½
45	157	10	–	200	700	–	–	2	16	2	5	–	0	16	–	10	–
46	161	–	–	300	1050	–	–	2	17	2	5	7½	0	17	–	10	7½
47	164	10	–	400	1400	–	–	2	18	2	6	3	0	18	–	11	3
48	168	–	–	500	1750	–	–	2	19	2	6	10½	0	19	–	11	10½
49	171	10	–	600	2100	–	–	2	20	2	7	6	0	20	–	12	6
50	175	–	–	700	2450	–	–	2	21	2	8	1½	0	21	–	13	1½
51	178	10	–	800	2800	–	–	2	22	2	8	9	0	22	–	13	9
52	182	–	–	900	3150	–	–	2	23	2	9	4½	0	23	–	14	4½
53	185	10	–	1000	3500	–	–	2	24	2	10	–	0	24	–	15	–
54	189	–	–	2000	7000	–	–	2	25	2	10	7½	0	25	–	15	7½
55	192	10	–	3000	10,500	–	–	2	26	2	11	3	0	26	–	16	3
56	196	–	–	4000	14,000	–	–	2	27	2	11	10½	0	27	–	16	10½

72s. 4d. per Cwt.   *7¾d. per lb.*   £72. 6s. 8d. per Ton.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	12	4	57	206	3	–	1	–	–	18	1	3	–	2	14	3
2	7	4	8	58	209	15	4	1	1	–	18	8¾	3	1	2	14	10¾
3	10	17	–	59	213	7	8	1	2	–	19	4½	3	2	2	15	6½
4	14	9	4	60	217	–	–	1	3	1	–	–¼	3	3	2	16	2¼
5	18	1	8	61	220	12	4	1	4	1	–	8	3	4	2	16	10
6	21	14	–	62	224	4	8	1	5	1	1	3¾	3	5	2	17	5¾
7	25	6	4	63	227	17	–	1	6	1	1	11½	3	6	2	18	1½
8	28	18	8	64	231	9	4	1	7	1	2	7¼	3	7	2	18	9¼
9	32	11	–	65	235	1	8	1	8	1	3	3	3	8	2	19	5
10	36	3	4	66	238	14	–	1	9	1	3	10¾	3	9	3	–	–¾
11	39	15	8	67	242	6	4	1	10	1	4	6½	3	10	3	–	8½
12	43	8	–	68	245	18	8	1	11	1	5	2¼	3	11	3	1	4¼
13	47	–	4	69	249	11	–	1	12	1	5	10	3	12	3	2	–
14	50	12	8	70	253	3	4	1	13	1	6	5¾	3	13	3	2	7¾
15	54	5	–	71	256	15	8	1	14	1	7	1½	3	14	3	3	3½
16	57	17	4	72	260	8	–	1	15	1	7	9¼	3	15	3	3	11¼
17	61	9	8	73	264	–	4	1	16	1	8	5	3	16	3	4	7
18	65	2	–	74	267	12	8	1	17	1	9	–¾	3	17	3	5	2¾
19	68	14	4	75	271	5	–	1	18	1	9	8½	3	18	3	5	10½
20	72	6	8	76	274	17	4	1	19	1	10	4¼	3	19	3	6	6¼
21	75	19	–	77	278	9	8	1	20	1	11	–	3	20	3	7	2
22	79	11	4	78	282	2	–	1	21	1	11	7¾	3	21	3	7	9¾
23	83	3	8	79	285	14	4	1	22	1	12	3½	3	22	3	8	5½
24	86	16	–	80	289	6	8	1	23	1	12	11¼	3	23	3	9	1¼
25	90	8	4	81	292	19	–	1	24	1	13	7	3	24	3	9	9
26	94	–	8	82	296	11	4	1	25	1	14	2¾	3	25	3	10	4¾
27	97	13	–	83	300	3	8	1	26	1	14	10½	3	26	3	11	–½
28	101	5	4	84	303	16	–	1	27	1	15	6¼	3	27	3	11	8¼
29	104	17	8	85	307	8	4	2	—	1	16	2					
30	108	10	–	86	311	–	8	2	1	1	16	9¾	0	1	–	–	7¾
31	112	2	4	87	314	13	–	2	2	1	17	5½	0	2	–	1	3½
32	115	14	8	88	318	5	4	2	3	1	18	1¼	0	3	–	1	11¼
33	119	7	–	89	321	17	8	2	4	1	18	9	0	4	–	2	7
34	122	19	4	90	325	10	–	2	5	1	19	4¾	0	5	–	3	2¾
35	126	11	8	91	329	2	4	2	6	2	–	–½	0	6	–	3	10½
36	130	4	–	92	332	14	8	2	7	2	–	8¼	0	7	–	4	6¼
37	133	16	4	93	336	7	–	2	8	2	1	4	0	8	–	5	2
38	137	8	8	94	339	19	4	2	9	2	1	11¾	0	9	–	5	9¾
39	141	1	–	95	343	11	8	2	10	2	2	7½	0	10	–	6	5½
40	144	13	4	96	347	4	–	2	11	2	3	3¼	0	11	–	7	1¼
41	148	5	8	97	350	16	4	2	12	2	3	11	0	12	–	7	9
42	151	18	–	98	354	8	8	2	13	2	4	6¾	0	13	–	8	4¾
43	155	10	4	99	358	1	–	2	14	2	5	2½	0	14	–	9	–½
44	159	2	8	100	361	13	4	2	15	2	5	10¼	0	15	–	9	8¼
45	162	15	–	200	723	6	8	2	16	2	6	6	0	16	–	10	4
46	166	7	4	300	1085	–	–	2	17	2	7	1¾	0	17	–	10	11¾
47	169	19	8	400	1446	13	4	2	18	2	7	9½	0	18	–	11	7½
48	173	12	–	500	1808	6	8	2	19	2	8	5¼	0	19	–	12	3¼
49	177	4	4	600	2170	–	–	2	20	2	9	1	0	20	–	12	11
50	180	16	8	700	2531	13	4	2	21	2	9	8¾	0	21	–	13	6¾
51	184	9	–	800	2893	6	8	2	22	2	10	4½	0	22	–	14	2½
52	188	1	4	900	3255	–	–	2	23	2	11	–¼	0	23	–	14	10¼
53	191	13	8	1000	3616	13	4	2	24	2	11	8	0	24	–	15	6
54	195	6	–	2000	7233	6	8	2	25	2	12	3¾	0	25	–	16	1¾
55	198	18	4	3000	10,850	–	–	2	26	2	12	11½	0	26	–	16	9½
56	202	10	8	4000	14,466	13	4	2	27	2	13	7¼	0	27	–	17	5¼

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	14	8	57	212	16	–	1	–	–	18	8	3	–	2	16	–
2	7	9	4	58	216	10	8	1	1	–	19	4	3	1	2	16	8
3	11	4	–	59	220	5	4	1	2	1	–	–	3	2	2	17	4
4	14	18	8	60	224	–	–	1	3	1	–	8	3	3	2	18	–
5	18	13	4	61	227	14	8	1	4	1	1	4	3	4	2	18	8
6	22	8	–	62	231	9	4	1	5	1	2	–	3	5	2	19	4
7	26	2	8	63	235	4	–	1	6	1	2	8	3	6	3	–	–
8	29	17	4	64	238	18	8	1	7	1	3	4	3	7	3	–	8
9	33	12	–	65	242	13	4	1	8	1	4	–	3	8	3	1	4
10	37	6	8	66	246	8	–	1	9	1	4	8	3	9	3	2	–
11	41	1	4	67	250	2	8	1	10	1	5	4	3	10	3	2	8
12	44	16	–	68	253	17	4	1	11	1	6	–	3	11	3	3	4
13	48	10	8	69	257	12	–	1	12	1	6	8	3	12	3	4	–
14	52	5	4	70	261	6	8	1	13	1	7	4	3	13	3	4	8
15	56	–	–	71	265	1	4	1	14	1	8	–	3	14	3	5	4
16	59	14	8	72	268	16	–	1	15	1	8	8	3	15	3	6	–
17	63	9	4	73	272	10	8	1	16	1	9	4	3	16	3	6	8
18	67	4	–	74	276	5	4	1	17	1	10	–	3	17	3	7	4
19	70	18	8	75	280	–	–	1	18	1	10	8	3	18	3	8	–
20	74	13	4	76	283	14	8	1	19	1	11	4	3	19	3	8	8
21	78	8	–	77	287	9	4	1	20	1	12	–	3	20	3	9	4
22	82	2	8	78	291	4	–	1	21	1	12	8	3	21	3	10	–
23	85	17	4	79	294	18	8	1	22	1	13	4	3	22	3	10	8
24	89	12	–	80	298	13	4	1	23	1	14	–	3	23	3	11	4
25	93	6	8	81	302	8	–	1	24	1	14	8	3	24	3	12	–
26	97	1	4	82	306	2	8	1	25	1	15	4	3	25	3	12	8
27	100	16	–	83	309	17	4	1	26	1	16	–	3	26	3	13	4
28	104	10	8	84	313	12	–	1	27	1	16	8	3	27	3	14	–
29	108	5	4	85	317	6	8	2	—	1	17	4					
30	112	–	–	86	321	1	4	2	1	1	18	–	0	1	–	–	8
31	115	14	8	87	324	16	–	2	2	1	18	8	0	2	–	1	4
32	119	9	4	88	328	10	8	2	3	1	19	4	0	3	–	2	–
33	123	4	–	89	332	5	4	2	4	2	–	–	0	4	–	2	8
34	126	18	8	90	336	–	–	2	5	2	–	8	0	5	–	3	4
35	130	13	4	91	339	14	8	2	6	2	1	4	0	6	–	4	–
36	134	8	–	92	343	9	4	2	7	2	2	–	0	7	–	4	8
37	138	2	8	93	347	4	–	2	8	2	2	8	0	8	–	5	4
38	141	17	4	94	350	18	8	2	9	2	3	4	0	9	–	6	–
39	145	12	–	95	354	13	4	2	10	2	4	–	0	10	–	6	8
40	149	6	8	96	358	8	–	2	11	2	4	8	0	11	–	7	4
41	153	1	4	97	362	2	8	2	12	2	5	4	0	12	–	8	–
42	156	16	–	98	365	17	4	2	13	2	6	–	0	13	–	8	8
43	160	10	8	99	369	12	–	2	14	2	6	8	0	14	–	9	4
44	164	5	4	100	373	6	8	2	15	2	7	4	0	15	–	10	–
45	168	–	–	200	746	13	4	2	16	2	8	–	0	16	–	10	8
46	171	14	8	300	1120	–	–	2	17	2	8	8	0	17	–	11	4
47	175	9	4	400	1493	6	8	2	18	2	9	4	0	18	–	12	–
48	179	4	–	500	1866	13	4	2	19	2	10	–	0	19	–	12	8
49	182	18	8	600	2240	–	–	2	20	2	10	8	0	20	–	13	4
50	186	13	4	700	2613	6	8	2	21	2	11	4	0	21	–	14	–
51	190	8	–	800	2986	13	4	2	22	2	12	–	0	22	–	14	8
52	194	2	8	900	3360	–	–	2	23	2	12	8	0	23	–	15	4
53	197	17	4	1000	3733	6	8	2	24	2	13	4	0	24	–	16	–
54	201	12	–	2000	7466	13	4	2	25	2	14	–	0	25	–	16	8
55	205	6	8	3000	11,200	–	–	2	26	2	14	8	0	26	–	17	4
56	209	1	4	4000	14,933	6	8	2	27	2	15	4	0	27	–	18	–

77*s*. *per Cwt*. 8¼*d*. *per lb*. £77. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	17	–	57	219	9	–	1	–	–	19	3	3	–	2	17	9
2	7	14	–	58	223	6	–	1	1	–	19	11¼	3	1	2	18	5¼
3	11	11	–	59	227	3	–	1	2	1	–	7½	3	2	2	19	1½
4	15	8	–	60	231	–	–	1	3	1	1	3¾	3	3	2	19	9¾
5	19	5	–	61	234	17	–	1	4	1	2	–	3	4	3	–	6
6	23	2	–	62	238	14	–	1	5	1	2	8¼	3	5	3	1	2¼
7	26	19	–	63	242	11	–	1	6	1	3	4½	3	6	3	1	10½
8	30	16	–	64	246	8	–	1	7	1	4	–¾	3	7	3	2	6¾
9	34	13	–	65	250	5	–	1	8	1	4	9	3	8	3	3	3
10	38	10	–	66	254	2	–	1	9	1	5	5¼	3	9	3	3	11¼
11	42	7	–	67	257	19	–	1	10	1	6	1½	3	10	3	4	7½
12	46	4	–	68	261	16	–	1	11	1	6	9¾	3	11	3	5	3¾
13	50	1	–	69	265	13	–	1	12	1	7	6	3	12	3	6	–
14	53	18	–	70	269	10	–	1	13	1	8	2¼	3	13	3	6	8¼
15	57	15	–	71	273	7	–	1	14	1	8	10½	3	14	3	7	4½
16	61	12	–	72	277	4	–	1	15	1	9	6¾	3	15	3	8	–¾
17	65	9	–	73	281	1	–	1	16	1	10	3	3	16	3	8	9
18	69	6	–	74	284	18	–	1	17	1	10	11¼	3	17	3	9	5¼
19	73	3	–	75	288	15	–	1	18	1	11	7½	3	18	3	10	1½
20	77	–	–	76	292	12	–	1	19	1	12	3¾	3	19	3	10	9¾
21	80	17	–	77	296	9	–	1	20	1	13	–	3	20	3	11	6
22	84	14	–	78	300	6	–	1	21	1	13	8¼	3	21	3	12	2¼
23	88	11	–	79	304	3	–	1	22	1	14	4½	3	22	3	12	10½
24	92	8	–	80	308	–	–	1	23	1	15	–¾	3	23	3	13	6¾
25	96	5	–	81	311	17	–	1	24	1	15	9	3	24	3	14	3
26	100	2	–	82	315	14	–	1	25	1	16	5¼	3	25	3	14	11¼
27	103	19	–	83	319	11	–	1	26	1	17	1½	3	26	3	15	7½
28	107	16	–	84	323	8	–	1	27	1	17	9¾	3	27	3	16	3¾
29	111	13	–	85	327	5	–	2	—	1	18	6					
30	115	10	–	86	331	2	–	2	1	1	19	2¼	0	1	–	–	8¼
31	119	7	–	87	334	19	–	2	2	1	19	10½	0	2	–	1	4½
32	123	4	–	88	338	16	–	2	3	2	–	6¾	0	3	–	2	–¾
33	127	1	–	89	342	13	–	2	4	2	1	3	0	4	–	2	9
34	130	18	–	90	346	10	–	2	5	2	1	11¼	0	5	–	3	5¼
35	134	15	–	91	350	7	–	2	6	2	2	7½	0	6	–	4	1½
36	138	12	–	92	354	4	–	2	7	2	3	3¾	0	7	–	4	9¾
37	142	9	–	93	358	1	–	2	8	2	4	–	0	8	–	5	6
38	146	6	–	94	361	18	–	2	9	2	4	8¼	0	9	–	6	2¼
39	150	3	–	95	365	15	–	2	10	2	5	4½	0	10	–	6	10½
40	154	–	–	96	369	12	–	2	11	2	6	–¾	0	11	–	7	6¾
41	157	17	–	97	373	9	–	2	12	2	6	9	0	12	–	8	3
42	161	14	–	98	377	6	–	2	13	2	7	5¼	0	13	–	8	11¼
43	165	11	–	99	381	3	–	2	14	2	8	1½	0	14	–	9	7½
44	169	8	–	100	385	–	–	2	15	2	8	9¾	0	15	–	10	3¾
45	173	5	–	200	770	–	–	2	16	2	9	6	0	16	–	11	–
46	177	2	–	300	1155	–	–	2	17	2	10	2¼	0	17	–	11	8¼
47	180	19	–	400	1540	–	–	2	18	2	10	10½	0	18	–	12	4½
48	184	16	–	500	1925	–	–	2	19	2	11	6¾	0	19	–	13	–¾
49	188	13	–	600	2310	–	–	2	20	2	12	3	0	20	–	13	9
50	192	10	–	700	2695	–	–	2	21	2	12	11¼	0	21	–	14	5¼
51	196	7	–	800	3080	–	–	2	22	2	13	7½	0	22	–	15	1½
52	200	4	–	900	3465	–	–	2	23	2	14	3¾	0	23	–	15	9¾
53	204	1	–	1000	3850	–	–	2	24	2	15	–	0	24	–	16	6
54	207	18	–	2000	7700	–	–	2	25	2	15	8¼	0	25	–	17	2¼
55	211	15	–	3000	11,550	–	–	2	26	2	16	4½	0	26	–	17	10½
56	215	12	–	4000	15,400	–	–	2	27	2	17	–¾	0	27	–	18	6¾

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	3	19	4	57	226	2	–	1	–	–	19	10	3	–	2	19	6
2	7	18	8	58	230	1	4	1	1	1	–	6½	3	1	3	–	2½
3	11	18	–	59	234	–	8	1	2	1	1	3	3	2	3	–	11
4	15	17	4	60	238	–	–	1	3	1	1	11½	3	3	3	1	7½
5	19	16	8	61	241	19	4	1	4	1	2	8	3	4	3	2	4
6	23	16	–	62	245	18	8	1	5	1	3	4½	3	5	3	3	–½
7	27	15	4	63	249	18	–	1	6	1	4	1	3	6	3	3	9
8	31	14	8	64	253	17	4	1	7	1	4	9½	3	7	3	4	5½
9	35	14	–	65	257	16	8	1	8	1	5	6	3	8	3	5	2
10	39	13	4	66	261	16	–	1	9	1	6	2½	3	9	3	5	10½
11	43	12	8	67	265	15	4	1	10	1	6	11	3	10	3	6	7
12	47	12	–	68	269	14	8	1	11	1	7	7½	3	11	3	7	3½
13	51	11	4	69	273	14	–	1	12	1	8	4	3	12	3	8	–
14	55	10	8	70	277	13	4	1	13	1	9	–½	3	13	3	8	8½
15	59	10	–	71	281	12	8	1	14	1	9	9	3	14	3	9	5
16	63	9	4	72	285	12	–	1	15	1	10	5½	3	15	3	10	1½
17	67	8	8	73	289	11	4	1	16	1	11	2	3	16	3	10	10
18	71	8	–	74	293	10	8	1	17	1	11	10½	3	17	3	11	6½
19	75	7	4	75	297	10	–	1	18	1	12	7	3	18	3	12	3
20	79	6	8	76	301	9	4	1	19	1	13	3½	3	19	3	12	11½
21	83	6	–	77	305	8	8	1	20	1	14	–	3	20	3	13	8
22	87	5	4	78	309	8	–	1	21	1	14	8½	3	21	3	14	4½
23	91	4	8	79	313	7	4	1	22	1	15	5	3	22	3	15	1
24	95	4	–	80	317	6	8	1	23	1	16	1½	3	23	3	15	9½
25	99	3	4	81	321	6	–	1	24	1	16	10	3	24	3	16	6
26	103	2	8	82	325	5	4	1	25	1	17	6½	3	25	3	17	2½
27	107	2	–	83	329	4	8	1	26	1	18	3	3	26	3	17	11
28	111	1	4	84	333	4	–	1	27	1	18	11½	3	27	3	18	7½
29	115	–	8	85	337	3	4	2	—	1	19	8					
30	119	–	–	86	341	2	8	2	1	2	–	4½	0	1	–	–	8½
31	122	19	4	87	345	2	–	2	2	2	1	1	0	2	–	1	5
32	126	18	8	88	349	1	4	2	3	2	1	9½	0	3	–	2	1½
33	130	18	–	89	353	–	8	2	4	2	2	6	0	4	–	2	10
34	134	17	4	90	357	–	–	2	5	2	3	2½	0	5	–	3	6½
35	138	16	8	91	360	19	4	2	6	2	3	11	0	6	–	4	3
36	142	16	–	92	364	18	8	2	7	2	4	7½	0	7	–	4	11½
37	146	15	4	93	368	18	–	2	8	2	5	4	0	8	–	5	8
38	150	14	8	94	372	17	4	2	9	2	6	–½	0	9	–	6	4½
39	154	14	–	95	376	16	8	2	10	2	6	9	0	10	–	7	1
40	158	13	4	96	380	16	–	2	11	2	7	5½	0	11	–	7	9½
41	162	12	8	97	384	15	4	2	12	2	8	2	0	12	–	8	6
42	166	12	–	98	388	14	8	2	13	2	8	10½	0	13	–	9	2½
43	170	11	4	99	392	14	–	2	14	2	9	7	0	14	–	9	11
44	174	10	8	100	396	13	4	2	15	2	10	3½	0	15	–	10	7½
45	178	10	–	200	793	6	8	2	16	2	11	–	0	16	–	11	4
46	182	9	4	300	1190	–	–	2	17	2	11	8½	0	17	–	12	–½
47	186	8	8	400	1586	13	4	2	18	2	12	5	0	18	–	12	9
48	190	8	–	500	1983	6	8	2	19	2	13	1½	0	19	–	13	5½
49	194	7	4	600	2380	–	–	2	20	2	13	10	0	20	–	14	2
50	198	6	8	700	2776	13	4	2	21	2	14	6½	0	21	–	14	10½
51	202	6	–	800	3173	6	8	2	22	2	15	3	0	22	–	15	7
52	206	5	4	900	3570	–	–	2	23	2	15	11½	0	23	–	16	3½
53	210	4	8	1000	3966	13	4	2	24	2	16	8	0	24	–	17	–
54	214	4	–	2000	7933	6	8	2	25	2	17	4½	0	25	–	17	8½
55	218	3	4	3000	11,900	–	–	2	26	2	18	1	0	26	–	18	5
56	222	2	8	4000	15,866	13	4	2	27	2	18	9½	0	27	–	19	1½

81*s.* 8*d.* *per Cwt.* 8¾*d.* *per lb.* £81. 13*s.* 4*d.* *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	1	8	57	232	15	–	1	–	1	–	5	3	–	3	1	3
2	8	3	4	58	236	16	8	1	1	1	1	1¾	3	1	3	1	11¾
3	12	5	–	59	240	18	4	1	2	1	1	10½	3	2	3	2	8½
4	16	6	8	60	245	–	–	1	3	1	2	7¼	3	3	3	3	5¼
5	20	8	4	61	249	1	8	1	4	1	3	4	3	4	3	4	2
6	24	10	–	62	253	3	4	1	5	1	4	–¾	3	5	3	4	10¾
7	28	11	8	63	257	5	–	1	6	1	4	9½	3	6	3	5	7½
8	32	13	4	64	261	6	8	1	7	1	5	6¼	3	7	3	6	4¼
9	36	15	–	65	265	8	4	1	8	1	6	3	3	8	3	7	1
10	40	16	8	66	269	10	–	1	9	1	6	11¾	3	9	3	7	9¾
11	44	18	4	67	273	11	8	1	10	1	7	8½	3	10	3	8	6½
12	49	–	–	68	277	13	4	1	11	1	8	5¼	3	11	3	9	3¼
13	53	1	8	69	281	15	–	1	12	1	9	2	3	12	3	10	–
14	57	3	4	70	285	16	8	1	13	1	9	10¾	3	13	3	10	8¾
15	61	5	–	71	289	18	4	1	14	1	10	7½	3	14	3	11	5½
16	65	6	8	72	294	–	–	1	15	1	11	4¼	3	15	3	12	2¼
17	69	8	4	73	298	1	8	1	16	1	12	1	3	16	3	12	11
18	73	10	–	74	302	3	4	1	17	1	12	9¾	3	17	3	13	7¾
19	77	11	8	75	306	5	–	1	18	1	13	6½	3	18	3	14	4½
20	81	13	4	76	310	6	8	1	19	1	14	3¼	3	19	3	15	1¼
21	85	15	–	77	314	8	4	1	20	1	15	–	3	20	3	15	10
22	89	16	8	78	318	10	–	1	21	1	15	8¾	3	21	3	16	6¾
23	93	18	4	79	322	11	8	1	22	1	16	5½	3	22	3	17	3½
24	98	–	–	80	326	13	4	1	23	1	17	2¼	3	23	3	18	–¼
25	102	1	8	81	330	15	–	1	24	1	17	11	3	24	3	18	9
26	106	3	4	82	334	16	8	1	25	1	18	7¾	3	25	3	19	5¾
27	110	5	–	83	338	18	4	1	26	1	19	4½	3	26	4	–	2½
28	114	6	8	84	343	–	–	1	27	2	–	1¼	3	27	4	–	11¼
29	118	8	4	85	347	1	8	2	—	2	–	10					
30	122	10	–	86	351	3	4	2	1	2	1	6¾	0	1	–	–	8¾
31	126	11	8	87	355	5	–	2	2	2	2	3½	0	2	–	1	5½
32	130	13	4	88	359	6	8	2	3	2	3	–¼	0	3	–	2	2¼
33	134	15	–	89	363	8	4	2	4	2	3	9	0	4	–	2	11
34	138	16	8	90	367	10	–	2	5	2	4	5¾	0	5	–	3	7¾
35	142	18	4	91	371	11	8	2	6	2	5	2½	0	6	–	4	4½
36	147	–	–	92	375	13	4	2	7	2	5	11¼	0	7	–	5	1¼
37	151	1	8	93	379	15	–	2	8	2	6	8	0	8	–	5	10
38	155	3	4	94	383	16	8	2	9	2	7	4¾	0	9	–	6	6¾
39	159	5	–	95	387	18	4	2	10	2	8	1½	0	10	–	7	3½
40	163	6	8	96	392	–	–	2	11	2	8	10¼	0	11	–	8	–¼
41	167	8	4	97	396	1	8	2	12	2	9	7	0	12	–	8	9
42	171	10	–	98	400	3	4	2	13	2	10	3¾	0	13	–	9	5¾
43	175	11	8	99	404	5	–	2	14	2	11	–½	0	14	–	10	2½
44	179	13	4	100	408	6	8	2	15	2	11	9¼	0	15	–	10	11¼
45	183	15	–	200	816	13	4	2	16	2	12	6	0	16	–	11	8
46	187	16	8	300	1225	–	–	2	17	2	13	2¾	0	17	–	12	4¾
47	191	18	4	400	1633	6	8	2	18	2	13	11½	0	18	–	13	1½
48	196	–	–	500	2041	13	4	2	19	2	14	8¼	0	19	–	13	10¼
49	200	1	8	600	2450	–	–	2	20	2	15	5	0	20	–	14	7
50	204	3	4	700	2858	6	8	2	21	2	16	1¾	0	21	–	15	3¾
51	208	5	–	800	3266	13	4	2	22	2	16	10½	0	22	–	16	–½
52	212	6	8	900	3675	–	–	2	23	2	17	7¼	0	23	–	16	9¼
53	216	8	4	1000	4083	6	8	2	24	2	18	4	0	24	–	17	6
54	220	10	–	2000	8166	13	4	2	25	2	19	–¾	0	25	–	18	2¾
55	224	11	8	3000	12,250	–	–	2	26	2	19	9½	0	26	–	18	11½
56	228	13	4	4000	16,333	6	8	2	27	3	–	6¼	0	27	–	19	8¼

£84. per Ton. 9*d*. per lb. 84*s*. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	4	–	57	239	8	–	1	–	1	1	–	3	–	3	3	–
2	8	8	–	58	243	12	–	1	1	1	1	9	3	1	3	3	9
3	12	12	–	59	247	16	–	1	2	1	2	6	3	2	3	4	6
4	16	16	–	60	252	–	–	1	3	1	3	3	3	3	3	5	3
5	21	–	–	61	256	4	–	1	4	1	4	–	3	4	3	6	–
6	25	4	–	62	260	8	–	1	5	1	4	9	3	5	3	6	9
7	29	8	–	63	264	12	–	1	6	1	5	6	3	6	3	7	6
8	33	12	–	64	268	16	–	1	7	1	6	3	3	7	3	8	3
9	37	16	–	65	273	–	–	1	8	1	7	–	3	8	3	9	–
10	42	–	–	66	277	4	–	1	9	1	7	9	3	9	3	9	9
11	46	4	–	67	281	8	–	1	10	1	8	6	3	10	3	10	6
12	50	8	–	68	285	12	–	1	11	1	9	3	3	11	3	11	3
13	54	12	–	69	289	16	–	1	12	1	10	–	3	12	3	12	–
14	58	16	–	70	294	–	–	1	13	1	10	9	3	13	3	12	9
15	63	–	–	71	298	4	–	1	14	1	11	6	3	14	3	13	6
16	67	4	–	72	302	8	–	1	15	1	12	3	3	15	3	14	3
17	71	8	–	73	306	12	–	1	16	1	13	–	3	16	3	15	–
18	75	12	–	74	310	16	–	1	17	1	13	9	3	17	3	15	9
19	79	16	–	75	315	–	–	1	18	1	14	6	3	18	3	16	6
20	84	–	–	76	319	4	–	1	19	1	15	3	3	19	3	17	3
21	88	4	–	77	323	8	–	1	20	1	16	–	3	20	3	18	–
22	92	8	–	78	327	12	–	1	21	1	16	9	3	21	3	18	9
23	96	12	–	79	331	16	–	1	22	1	17	6	3	22	3	19	6
24	100	16	–	80	336	–	–	1	23	1	18	3	3	23	4	–	3
25	105	–	–	81	340	4	–	1	24	1	19	–	3	24	4	1	–
26	109	4	–	82	344	8	–	1	25	1	19	9	3	25	4	1	9
27	113	8	–	83	348	12	–	1	26	2	–	6	3	26	4	2	6
28	117	12	–	84	352	16	–	1	27	2	1	3	3	27	4	3	3
29	121	16	–	85	357	–	–	2	—	2	2	–					
30	126	–	–	86	361	4	–	2	1	2	2	9	0	1	–	–	9
31	130	4	–	87	365	8	–	2	2	2	3	6	0	2	–	1	6
32	134	8	–	88	369	12	–	2	3	2	4	3	0	3	–	2	3
33	138	12	–	89	373	16	–	2	4	2	5	–	0	4	–	3	–
34	142	16	–	90	378	–	–	2	5	2	5	9	0	5	–	3	9
35	147	–	–	91	382	4	–	2	6	2	6	6	0	6	–	4	6
36	151	4	–	92	386	8	–	2	7	2	7	3	0	7	–	5	3
37	155	8	–	93	390	12	–	2	8	2	8	–	0	8	–	6	–
38	159	12	–	94	394	16	–	2	9	2	8	9	0	9	–	6	9
39	163	16	–	95	399	–	–	2	10	2	9	6	0	10	–	7	6
40	168	–	–	96	403	4	–	2	11	2	10	3	0	11	–	8	3
41	172	4	–	97	407	8	–	2	12	2	11	–	0	12	–	9	–
42	176	8	–	98	411	12	–	2	13	2	11	9	0	13	–	9	9
43	180	12	–	99	415	16	–	2	14	2	12	6	0	14	–	10	6
44	184	16	–	100	420	–	–	2	15	2	13	3	0	15	–	11	3
45	189	–	–	200	840	–	–	2	16	2	14	–	0	16	–	12	–
46	193	4	–	300	1260	–	–	2	17	2	14	9	0	17	–	12	9
47	197	8	–	400	1680	–	–	2	18	2	15	6	0	18	–	13	6
48	201	12	–	500	2100	–	–	2	19	2	16	3	0	19	–	14	3
49	205	16	–	600	2520	–	–	2	20	2	17	–	0	20	–	15	–
50	210	–	–	700	2940	–	–	2	21	2	17	9	0	21	–	15	9
51	214	4	–	800	3360	–	–	2	22	2	18	6	0	22	–	16	6
52	218	8	–	900	3780	–	–	2	23	2	19	3	0	23	–	17	3
53	222	12	–	1000	4200	–	–	2	24	3	–	–	0	24	–	18	–
54	226	16	–	2000	8400	–	–	2	25	3	–	9	0	25	–	18	9
55	231	–	–	3000	12,600	–	–	2	26	3	1	6	0	26	–	19	6
56	235	4	–	4000	16,800	–	–	2	27	3	2	3	0	27	1	–	3

86*s*. 4*d*. *per Cwt.* 9¼*d*. *per lb.* £86. 6*s*. 8*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	6	4	57	246	1	–	1	–	1	1	7	3	–	3	4	9
2	8	12	8	58	250	7	4	1	1	1	2	4¼	3	1	3	5	6¼
3	12	19	–	59	254	13	8	1	2	1	3	1½	3	2	3	6	3½
4	17	5	4	60	259	–	–	1	3	1	3	10¾	3	3	3	7	–¾
5	21	11	8	61	263	6	4	1	4	1	4	8	3	4	3	7	10
6	25	18	–	62	267	12	8	1	5	1	5	5¼	3	5	3	8	7¼
7	30	4	4	63	271	19	–	1	6	1	6	2½	3	6	3	9	4½
8	34	10	8	64	276	5	4	1	7	1	6	11¾	3	7	3	10	1¾
9	38	17	–	65	280	11	8	1	8	1	7	9	3	8	3	10	11
10	43	3	4	66	284	18	–	1	9	1	8	6¼	3	9	3	11	8¼
11	47	9	8	67	289	4	4	1	10	1	9	3½	3	10	3	12	5½
12	51	16	–	68	293	10	8	1	11	1	10	–¾	3	11	3	13	2¾
13	56	2	4	69	297	17	–	1	12	1	10	10	3	12	3	14	–
14	60	8	8	70	302	3	4	1	13	1	11	7¼	3	13	3	14	9¼
15	64	15	–	71	306	9	8	1	14	1	12	4½	3	14	3	15	6½
16	69	1	4	72	310	16	–	1	15	1	13	1¾	3	15	3	16	3¾
17	73	7	8	73	315	2	4	1	16	1	13	11	3	16	3	17	1
18	77	14	–	74	319	8	8	1	17	1	14	8¼	3	17	3	17	10¼
19	82	–	4	75	323	15	–	1	18	1	15	5½	3	18	3	18	7½
20	86	6	8	76	328	1	4	1	19	1	16	2¾	3	19	3	19	4¾
21	90	13	–	77	332	7	8	1	20	1	17	–	3	20	4	–	2
22	94	19	4	78	336	14	–	1	21	1	17	9¼	3	21	4	–	11¼
23	99	5	8	79	341	–	4	1	22	1	18	6½	3	22	4	1	8½
24	103	12	–	80	345	6	8	1	23	1	19	3¾	3	23	4	2	5¾
25	107	18	4	81	349	13	–	1	24	2	–	1	3	24	4	3	3
26	112	4	8	82	353	19	4	1	25	2	–	10¼	3	25	4	4	–¼
27	116	11	–	83	358	5	8	1	26	2	1	7½	3	26	4	4	9½
28	120	17	4	84	362	12	–	1	27	2	2	4¾	3	27	4	5	6¾
29	125	3	8	85	366	18	4	2	—	2	3	2					
30	129	10	–	86	371	4	8	2	1	2	3	11¼	0	1	–	–	9¼
31	133	16	4	87	375	11	–	2	2	2	4	8½	0	2	–	1	6½
32	138	2	8	88	379	17	4	2	3	2	5	5¾	0	3	–	2	3¾
33	142	9	–	89	384	3	8	2	4	2	6	3	0	4	–	3	1
34	146	15	4	90	388	10	–	2	5	2	7	–¼	0	5	–	3	10¼
35	151	1	8	91	392	16	4	2	6	2	7	9½	0	6	–	4	7½
36	155	8	–	92	397	2	8	2	7	2	8	6¾	0	7	–	5	4¾
37	159	14	4	93	401	9	–	2	8	2	9	4	0	8	–	6	2
38	164	–	8	94	405	15	4	2	9	2	10	1¼	0	9	–	6	11¼
39	168	7	–	95	410	1	8	2	10	2	10	10½	0	10	–	7	8½
40	172	13	4	96	414	8	–	2	11	2	11	7¾	0	11	–	8	5¾
41	176	19	8	97	418	14	4	2	12	2	12	5	0	12	–	9	3
42	181	6	–	98	423	–	8	2	13	2	13	2¼	0	13	–	10	–¼
43	185	12	4	99	427	7	–	2	14	2	13	11½	0	14	–	10	9½
44	189	18	8	100	431	13	4	2	15	2	14	8¾	0	15	–	11	6¾
45	194	5	–	200	863	6	8	2	16	2	15	6	0	16	–	12	4
46	198	11	4	300	1295	–	–	2	17	2	16	3¼	0	17	–	13	1¼
47	202	17	8	400	1726	13	4	2	18	2	17	–½	0	18	–	13	10½
48	207	4	–	500	2158	6	8	2	19	2	17	9¾	0	19	–	14	7¾
49	211	10	4	600	2590	–	–	2	20	2	18	7	0	20	–	15	5
50	215	16	8	700	3021	13	4	2	21	2	19	4¼	0	21	–	16	2¼
51	220	3	–	800	3453	6	8	2	22	3	–	1½	0	22	–	16	11½
52	224	9	4	900	3885	–	–	2	23	3	–	10¾	0	23	–	17	8¾
53	228	15	8	1000	4316	13	4	2	24	3	1	8	0	24	–	18	6
54	233	2	–	2000	8633	6	8	2	25	3	2	5¼	0	25	–	19	3¼
55	237	8	4	3000	12,950	–	–	2	26	3	3	2½	0	26	1	–	–½
56	241	14	8	4000	17,266	13	4	2	27	3	3	11¾	0	27	1	–	9¾

£88. 13s. 4d. per Ton. **9½d. per lb.** **88s. 8d. per Cwt.**

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	8	8	57	252	14	–	1	–	1	2	2	3	–	3	6	6
2	8	17	4	58	257	2	8	1	1	1	2	11½	3	1	3	7	3½
3	13	6	–	59	261	11	4	1	2	1	3	9	3	2	3	8	1
4	17	14	8	60	266	–	–	1	3	1	4	6½	3	3	3	8	10½
5	22	3	4	61	270	8	8	1	4	1	5	4	3	4	3	9	8
6	26	12	–	62	274	17	4	1	5	1	6	1½	3	5	3	10	5½
7	31	–	8	63	279	6	–	1	6	1	6	11	3	6	3	11	3
8	35	9	4	64	283	14	8	1	7	1	7	8½	3	7	3	12	–½
9	39	18	–	65	288	3	4	1	8	1	8	6	3	8	3	12	10
10	44	6	8	66	292	12	–	1	9	1	9	3½	3	9	3	13	7½
11	48	15	4	67	297	–	8	1	10	1	10	1	3	10	3	14	5
12	53	4	–	68	301	9	4	1	11	1	10	10½	3	11	3	15	2½
13	57	12	8	69	305	18	–	1	12	1	11	8	3	12	3	16	–
14	62	1	4	70	310	6	8	1	13	1	12	5½	3	13	3	16	9½
15	66	10	–	71	314	15	4	1	14	1	13	3	3	14	3	17	7
16	70	18	8	72	319	4	–	1	15	1	14	–½	3	15	3	18	4½
17	75	7	4	73	323	12	8	1	16	1	14	10	3	16	3	19	2
18	79	16	–	74	328	1	4	1	17	1	15	7½	3	17	3	19	11½
19	84	4	8	75	332	10	–	1	18	1	16	5	3	18	4	–	9
20	88	13	4	76	336	18	8	1	19	1	17	2½	3	19	4	1	6½
21	93	2	–	77	341	7	4	1	20	1	18	–	3	20	4	2	4
22	97	10	8	78	345	16	–	1	21	1	18	9½	3	21	4	3	1½
23	101	19	4	79	350	4	8	1	22	1	19	7	3	22	4	3	11
24	106	8	–	80	354	13	4	1	23	2	–	4½	3	23	4	4	8½
25	110	16	8	81	359	2	–	1	24	2	1	2	3	24	4	5	6
26	115	5	4	82	363	10	8	1	25	2	1	11½	3	25	4	6	3½
27	119	14	–	83	367	19	4	1	26	2	2	9	3	26	4	7	1
28	124	2	8	84	372	8	–	1	27	2	3	6½	3	27	4	7	10½
29	128	11	4	85	376	16	8	2	—	2	4	4					
30	133	–	–	86	381	5	4	2	1	2	5	1½	0	1	–	–	9½
31	137	8	8	87	385	14	–	2	2	2	5	11	0	2	–	1	7
32	141	17	4	88	390	2	8	2	3	2	6	8½	0	3	–	2	4½
33	146	6	–	89	394	11	8	2	4	2	7	6	0	4	–	3	2
34	150	14	8	90	399	–	–	2	5	2	8	3½	0	5	–	3	11½
35	155	3	4	91	403	8	8	2	6	2	9	1	0	6	–	4	9
36	159	12	–	92	407	17	4	2	7	2	9	10½	0	7	–	5	6½
37	164	–	8	93	412	6	–	2	8	2	10	8	0	8	–	6	4
38	168	9	4	94	416	14	8	2	9	2	11	5½	0	9	–	7	1½
39	172	18	–	95	421	3	4	2	10	2	12	3	0	10	–	7	11
40	177	6	8	96	425	12	–	2	11	2	13	–½	0	11	–	8	8½
41	181	15	4	97	430	–	8	2	12	2	13	10	0	12	–	9	6
42	186	4	–	98	434	9	4	2	13	2	14	7½	0	13	–	10	3½
43	190	12	8	99	438	18	–	2	14	2	15	5	0	14	–	11	1
44	195	1	4	100	443	6	8	2	15	2	16	2½	0	15	–	11	10½
45	199	10	–	200	886	13	4	2	16	2	17	–	0	16	–	12	8
46	203	18	8	300	1330	–	–	2	17	2	17	9½	0	17	–	13	5½
47	208	7	4	400	1773	6	8	2	18	2	18	7	0	18	–	14	3
48	212	16	–	500	2216	13	4	2	19	2	19	4½	0	19	–	15	–½
49	217	4	8	600	2660	–	–	2	20	3	–	2	0	20	–	15	10
50	221	13	4	700	3103	6	8	2	21	3	–	11½	0	21	–	16	7½
51	226	2	–	800	3546	13	4	2	22	3	1	9	0	22	–	17	5
52	230	10	8	900	3990	–	–	2	23	3	2	6½	0	23	–	18	2½
53	234	19	4	1000	4433	6	8	2	24	3	3	4	0	24	–	19	–
54	239	8	–	2000	8866	13	4	2	25	3	4	1½	0	25	–	19	9½
55	243	16	8	3000	13,300	–	–	2	26	3	4	11	0	26	1	–	7
56	248	5	4	4000	17,733	6	8	2	27	3	5	8½	0	27	1	1	4½

91*s.* *per Cwt.* 9¾*d.* *per lb.* £91. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	11	–	57	259	7	–	1	–	1	2	9	3	–	3	8	3
2	9	2	–	58	263	18	–	1	1	1	3	6¾	3	1	3	9	–¾
3	13	13	–	59	268	9	–	1	2	1	4	4½	3	2	3	9	10½
4	18	4	–	60	273	–	–	1	3	1	5	2¼	3	3	3	10	8¼
5	22	15	–	61	277	11	–	1	4	1	6	–	3	4	3	11	6
6	27	6	–	62	282	2	–	1	5	1	6	9¾	3	5	3	12	3¾
7	31	17	–	63	286	13	–	1	6	1	7	7½	3	6	3	13	1½
8	36	8	–	64	291	4	–	1	7	1	8	5¼	3	7	3	13	11¼
9	40	19	–	65	295	15	–	1	8	1	9	3	3	8	3	14	9
10	45	10	–	66	300	6	–	1	9	1	10	–¾	3	9	3	15	6¾
11	50	1	–	67	304	17	–	1	10	1	10	10½	3	10	3	16	4½
12	54	12	–	68	309	8	–	1	11	1	11	8¼	3	11	3	17	2¼
13	59	3	–	69	313	19	–	1	12	1	12	6	3	12	3	18	–
14	63	14	–	70	318	10	–	1	13	1	13	3¾	3	13	3	18	9¾
15	68	5	–	71	323	1	–	1	14	1	14	1½	3	14	3	19	7½
16	72	16	–	72	327	12	–	1	15	1	14	11¼	3	15	4	–	5¼
17	77	7	–	73	332	3	–	1	16	1	15	9	3	16	4	1	3
18	81	18	–	74	336	14	–	1	17	1	16	6¾	3	17	4	2	–¾
19	86	9	–	75	341	5	–	1	18	1	17	4½	3	18	4	2	10½
20	91	–	–	76	345	16	–	1	19	1	18	2¼	3	19	4	3	8¼
21	95	11	–	77	350	7	–	1	20	1	19	–	3	20	4	4	6
22	100	2	–	78	354	18	–	1	21	1	19	9¾	3	21	4	5	3¾
23	104	13	–	79	359	9	–	1	22	2	–	7½	3	22	4	6	1½
24	109	4	–	80	364	–	–	1	23	2	1	5¼	3	23	4	6	11¼
25	113	15	–	81	368	11	–	1	24	2	2	3	3	24	4	7	9
26	118	6	–	82	373	2	–	1	25	2	3	–¾	3	25	4	8	6¾
27	122	17	–	83	377	13	–	1	26	2	3	10½	3	26	4	9	4½
28	127	8	–	84	382	4	–	1	27	2	4	8¼	3	27	4	10	2¼
29	131	19	–	85	386	15	–	2	—	2	5	6					
30	136	10	–	86	391	6	–	2	1	2	6	3¾	0	1	–	–	9¾
31	141	1	–	87	395	17	–	2	2	2	7	1½	0	2	–	1	7½
32	145	12	–	88	400	8	–	2	3	2	7	11¼	0	3	–	2	5¼
33	150	3	–	89	404	19	–	2	4	2	8	9	0	4	–	3	3
34	154	14	–	90	409	10	–	2	5	2	9	6¾	0	5	–	4	–¾
35	159	5	–	91	414	1	–	2	6	2	10	4½	0	6	–	4	10½
36	163	16	–	92	418	12	–	2	7	2	11	2¼	0	7	–	5	8¼
37	168	7	–	93	423	3	–	2	8	2	12	–	0	8	–	6	6
38	172	18	–	94	427	14	–	2	9	2	12	9¾	0	9	–	7	3¾
39	177	9	–	95	432	5	–	2	10	2	13	7½	0	10	–	8	1½
40	182	–	–	96	436	16	–	2	11	2	14	5¼	0	11	–	8	11¼
41	186	11	–	97	441	7	–	2	12	2	15	3	0	12	–	9	9
42	191	2	–	98	445	18	–	2	13	2	16	–¾	0	13	–	10	6¾
43	195	13	–	99	450	9	–	2	14	2	16	10½	0	14	–	11	4½
44	200	4	–	100	455	–	–	2	15	2	17	8¼	0	15	–	12	2¼
45	204	15	–	200	910	–	–	2	16	2	18	6	0	16	–	13	–
46	209	6	–	300	1365	–	–	2	17	2	19	3¾	0	17	–	13	9¾
47	213	17	–	400	1820	–	–	2	18	3	–	1½	0	18	–	14	7½
48	218	8	–	500	2275	–	–	2	19	3	–	11¼	0	19	–	15	5¼
49	222	19	–	600	2730	–	–	2	20	3	1	9	0	20	–	16	3
50	227	10	–	700	3185	–	–	2	21	3	2	6¾	0	21	–	17	–¾
51	232	1	–	800	3640	–	–	2	22	3	3	4½	0	22	–	17	10½
52	236	12	–	900	4095	–	–	2	23	3	4	2¼	0	23	–	18	8¼
53	241	3	–	1000	4550	–	–	2	24	3	5	–	0	24	–	19	6
54	245	14	–	2000	9100	–	–	2	25	3	5	9¾	0	25	1	–	3¾
55	250	5	–	3000	13,650	–	–	2	26	3	6	7½	0	26	1	1	1½
56	254	16	–	4000	18,200	–	–	2	27	3	7	5¼	0	27	1	1	11¼

£93. 6s. 8d. per Ton. 10*d.* per *lb.* 93*s.* 4*d.* per *Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	13	4	57	266	–	–	1	–	1	3	4	3	–	3	10	–
2	9	6	8	58	270	13	4	1	1	1	4	2	3	1	3	10	10
3	14	–	–	59	275	6	8	1	2	1	5	–	3	2	3	11	8
4	18	13	4	60	280	–	–	1	3	1	5	10	3	3	3	12	6
5	23	6	8	61	284	13	4	1	4	1	6	8	3	4	3	13	4
6	28	–	–	62	289	6	8	1	5	1	7	6	3	5	3	14	2
7	32	13	4	63	294	–	–	1	6	1	8	4	3	6	3	15	–
8	37	6	8	64	298	13	4	1	7	1	9	2	3	7	3	15	10
9	42	–	–	65	303	6	8	1	8	1	10	–	3	8	3	16	8
10	46	13	4	66	308	–	–	1	9	1	10	10	3	9	3	17	6
11	51	6	8	67	312	13	4	1	10	1	11	8	3	10	3	18	4
12	56	–	–	68	317	6	8	1	11	1	12	6	3	11	3	19	2
13	60	13	4	69	322	–	–	1	12	1	13	4	3	12	4	–	–
14	65	6	8	70	326	13	4	1	13	1	14	2	3	13	4	–	10
15	70	–	–	71	331	6	8	1	14	1	15	–	3	14	4	1	8
16	74	13	4	72	336	–	–	1	15	1	15	10	3	15	4	2	6
17	79	6	8	73	340	13	4	1	16	1	16	8	3	16	4	3	4
18	84	–	–	74	345	6	8	1	17	1	17	6	3	17	4	4	2
19	88	13	4	75	350	–	–	1	18	1	18	4	3	18	4	5	–
20	93	6	8	76	354	13	4	1	19	1	19	2	3	19	4	5	10
21	98	–	–	77	359	6	8	1	20	2	–	–	3	20	4	6	8
22	102	13	4	78	364	–	–	1	21	2	–	10	3	21	4	7	6
23	107	6	8	79	368	13	4	1	22	2	1	8	3	22	4	8	4
24	112	–	–	80	373	6	8	1	23	2	2	6	3	23	4	9	2
25	116	13	4	81	378	–	–	1	24	2	3	4	3	24	4	10	–
26	121	6	8	82	382	13	4	1	25	2	4	2	3	25	4	10	10
27	126	–	–	83	387	6	8	1	26	2	5	–	3	26	4	11	8
28	130	13	4	84	392	–	–	1	27	2	5	10	3	27	4	12	6
29	135	6	8	85	396	13	4	2	—	2	6	8					
30	140	–	–	86	401	6	8	2	1	2	7	6	0	1	–	–	10
31	144	13	4	87	406	–	–	2	2	2	8	4	0	2	–	1	8
32	149	6	8	88	410	13	4	2	3	2	9	2	0	3	–	2	6
33	154	–	–	89	415	6	8	2	4	2	10	–	0	4	–	3	4
34	158	13	4	90	420	–	–	2	5	2	10	10	0	5	–	4	2
35	163	6	8	91	424	13	4	2	6	2	11	8	0	6	–	5	–
36	168	–	–	92	429	6	8	2	7	2	12	6	0	7	–	5	10
37	172	13	4	93	434	–	–	2	8	2	13	4	0	8	–	6	8
38	177	6	8	94	438	13	4	2	9	2	14	2	0	9	–	7	6
39	182	–	–	95	443	6	8	2	10	2	15	–	0	10	–	8	4
40	186	13	4	96	448	–	–	2	11	2	15	10	0	11	–	9	2
41	191	6	8	97	452	13	4	2	12	2	16	8	0	12	–	10	–
42	196	–	–	98	457	6	8	2	13	2	17	6	0	13	–	10	10
43	200	13	4	99	462	–	–	2	14	2	18	4	0	14	–	11	8
44	205	6	8	100	466	13	4	2	15	2	19	2	0	15	–	12	6
45	210	–	–	200	933	6	8	2	16	3	–	–	0	16	–	13	4
46	214	13	4	300	1400	–	–	2	17	3	–	10	0	17	–	14	2
47	219	6	8	400	1866	13	4	2	18	3	1	8	0	18	–	15	–
48	224	–	–	500	2333	6	8	2	19	3	2	6	0	19	–	15	10
49	228	13	4	600	2800	–	–	2	20	3	3	4	0	20	–	16	8
50	233	6	8	700	3266	13	4	2	21	3	4	2	0	21	–	17	6
51	238	–	–	800	3733	6	8	2	22	3	5	–	0	22	–	18	4
52	242	13	4	900	4200	–	–	2	23	3	5	10	0	23	–	19	2
53	247	6	8	1000	4666	13	4	2	24	3	6	8	0	24	1	–	–
54	252	–	–	2000	9333	6	8	2	25	3	7	6	0	25	1	–	10
55	256	13	4	3000	14,000	–	–	2	26	3	8	4	0	26	1	1	8
56	261	6	8	4000	18,666	13	4	2	27	3	9	2	0	27	1	2	6

95*s*. 8*d*. *per Cwt.* 10¼*d*. *per lb.* £95. 13*s*. 4*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	15	8	57	272	13	–	1	–	1	3	11	3	–	3	11	9
2	9	11	4	58	277	8	8	1	1	1	4	9¼	3	1	3	12	7¼
3	14	7	–	59	282	4	4	1	2	1	5	7½	3	2	3	13	5½
4	19	2	8	60	287	–	–	1	3	1	6	5¾	3	3	3	14	3¾
5	23	18	4	61	291	15	8	1	4	1	7	4	3	4	3	15	2
6	28	14	–	62	296	11	4	1	5	1	8	2¼	3	5	3	16	–¼
7	33	9	8	63	301	7	–	1	6	1	9	–½	3	6	3	16	10½
8	38	5	4	64	306	2	8	1	7	1	9	10¾	3	7	3	17	8¾
9	43	1	–	65	310	18	4	1	8	1	10	9	3	8	3	18	7
10	47	16	8	66	315	14	–	1	9	1	11	7¼	3	9	3	19	5¼
11	52	12	4	67	320	9	8	1	10	1	12	5½	3	10	4	–	3½
12	57	8	–	68	325	5	4	1	11	1	13	3¾	3	11	4	1	1¾
13	62	3	8	69	330	1	–	1	12	1	14	2	3	12	4	2	–
14	66	19	4	70	334	16	8	1	13	1	15	–¼	3	13	4	2	10¼
15	71	15	–	71	339	12	4	1	14	1	15	10½	3	14	4	3	8½
16	76	10	8	72	344	8	–	1	15	1	16	8¾	3	15	4	4	6¾
17	81	6	4	73	349	3	8	1	16	1	17	7	3	16	4	5	5
18	86	2	–	74	353	19	4	1	17	1	18	5¼	3	17	4	6	3¼
19	90	17	8	75	358	15	–	1	18	1	19	3½	3	18	4	7	1½
20	95	13	4	76	363	10	8	1	19	2	–	1¾	3	19	4	7	11¾
21	100	9	–	77	368	6	4	1	20	2	1	–	3	20	4	8	10
22	105	4	8	78	373	2	–	1	21	2	1	10¼	3	21	4	9	8¼
23	110	–	4	79	377	17	8	1	22	2	2	8½	3	22	4	10	6½
24	114	16	–	80	382	13	4	1	23	2	3	6¾	3	23	4	11	4¾
25	119	11	8	81	387	9	–	1	24	2	4	5	3	24	4	12	3
26	124	7	4	82	392	4	8	1	25	2	5	3¼	3	25	4	13	1¼
27	129	3	–	83	397	–	4	1	26	2	6	1½	3	26	4	13	11½
28	133	18	8	84	401	16	–	1	27	2	6	11¾	3	27	4	14	9¾
29	138	14	4	85	406	11	8	2	—	2	7	10					
30	143	10	–	86	411	7	4	2	1	2	8	8¼	0	1	–	–	10¼
31	148	5	8	87	416	3	–	2	2	2	9	6½	0	2	–	1	8½
32	153	1	4	88	420	18	8	2	3	2	10	4¾	0	3	–	2	6¾
33	157	17	–	89	425	14	4	2	4	2	11	3	0	4	–	3	5
34	162	12	8	90	430	10	–	2	5	2	12	1¼	0	5	–	4	3¼
35	167	8	4	91	435	5	8	2	6	2	12	11½	0	6	–	5	1½
36	172	4	–	92	440	1	4	2	7	2	13	9¾	0	7	–	5	11¾
37	176	19	8	93	444	17	–	2	8	2	14	8	0	8	–	6	10
38	181	15	4	94	449	12	8	2	9	2	15	6¼	0	9	–	7	8¼
39	186	11	–	95	454	8	4	2	10	2	16	4½	0	10	–	8	6½
40	191	6	8	96	459	4	–	2	11	2	17	2¾	0	11	–	9	4¾
41	196	2	4	97	463	19	8	2	12	2	18	1	0	12	–	10	3
42	200	18	–	98	468	15	4	2	13	2	18	11¼	0	13	–	11	1¼
43	205	13	8	99	473	11	–	2	14	2	19	9½	0	14	–	11	11½
44	210	9	4	100	478	6	8	2	15	3	–	7¾	0	15	–	12	9¾
45	215	5	–	200	956	13	4	2	16	3	1	6	0	16	–	13	8
46	220	–	8	300	1435	–	–	2	17	3	2	4¼	0	17	–	14	6¼
47	224	16	4	400	1913	6	8	2	18	3	3	2½	0	18	–	15	4½
48	229	12	–	500	2391	13	4	2	19	3	4	–¾	0	19	–	16	2¾
49	234	7	8	600	2870	–	–	2	20	3	4	11	0	20	–	17	1
50	239	3	4	700	3348	6	8	2	21	3	5	9¼	0	21	–	17	11¼
51	243	19	–	800	3826	13	4	2	22	3	6	7½	0	22	–	18	9½
52	248	14	8	900	4305	–	–	2	23	3	7	5¾	0	23	–	19	7¾
53	253	10	4	1000	4783	6	8	2	24	3	8	4	0	24	1	–	6
54	258	6	–	2000	9566	13	4	2	25	3	9	2¼	0	25	1	1	4¼
55	263	1	8	3000	14,350	–	–	2	26	3	10	–½	0	26	1	2	2½
56	267	17	4	4000	19,133	6	8	2	27	3	10	10¾	0	27	1	3	–¾

£98. *per Ton.* 10½*d. per lb.* 98*s. per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	4	18	–	57	279	6	–	1	–	1	4	6	3	–	3	13	6
2	9	16	–	58	284	4	–	1	1	1	5	4½	3	1	3	14	4½
3	14	14	–	59	289	2	–	1	2	1	6	3	3	2	3	15	3
4	19	12	–	60	294	–	–	1	3	1	7	1½	3	3	3	16	1½
5	24	10	–	61	298	18	–	1	4	1	8	–	3	4	3	17	–
6	29	8	–	62	303	16	–	1	5	1	8	10½	3	5	3	17	10½
7	34	6	–	63	308	14	–	1	6	1	9	9	3	6	3	18	9
8	39	4	–	64	313	12	–	1	7	1	10	7½	3	7	3	19	7½
9	44	2	–	65	318	10	–	1	8	1	11	6	3	8	4	–	6
10	49	–	–	66	323	8	–	1	9	1	12	4½	3	9	4	1	4½
11	53	18	–	67	328	6	–	1	10	1	13	3	3	10	4	2	3
12	58	16	–	68	333	4	–	1	11	1	14	1½	3	11	4	3	1½
13	63	14	–	69	338	2	–	1	12	1	15	–	3	12	4	4	–
14	68	12	–	70	343	–	–	1	13	1	15	10½	3	13	4	4	10½
15	73	10	–	71	347	18	–	1	14	1	16	9	3	14	4	5	9
16	78	8	–	72	352	16	–	1	15	1	17	7½	3	15	4	6	7½
17	83	6	–	73	357	14	–	1	16	1	18	6	3	16	4	7	6
18	88	4	–	74	362	12	–	1	17	1	19	4½	3	17	4	8	4½
19	93	2	–	75	367	10	–	1	18	2	–	3	3	18	4	9	3
20	98	–	–	76	372	8	–	1	19	2	1	1½	3	19	4	10	1½
21	102	18	–	77	377	6	–	1	20	2	2	–	3	20	4	11	–
22	107	16	–	78	382	4	–	1	21	2	2	10½	3	21	4	11	10½
23	112	14	–	79	387	2	–	1	22	2	3	9	3	22	4	12	9
24	117	12	–	80	392	–	–	1	23	2	4	7½	3	23	4	13	7½
25	122	10	–	81	396	18	–	1	24	2	5	6	3	24	4	14	6
26	127	8	–	82	401	16	–	1	25	2	6	4½	3	25	4	15	4½
27	132	6	–	83	406	14	–	1	26	2	7	3	3	26	4	16	3
28	137	4	–	84	411	12	–	1	27	2	8	1½	3	27	4	17	1½
29	142	2	–	85	416	10	–	2	—	2	9	–					
30	147	–	–	86	421	8	–	2	1	2	9	10½	0	1	–	–	10½
31	151	18	–	87	426	6	–	2	2	2	10	9	0	2	–	1	9
32	156	16	–	88	431	4	–	2	3	2	11	7½	0	3	–	2	7½
33	161	14	–	89	436	2	–	2	4	2	12	6	0	4	–	3	6
34	166	12	–	90	441	–	–	2	5	2	13	4½	0	5	–	4	4½
35	171	10	–	91	445	18	–	2	6	2	14	3	0	6	–	5	3
36	176	8	–	92	450	16	–	2	7	2	15	1½	0	7	–	6	1½
37	181	6	–	93	455	14	–	2	8	2	16	–	0	8	–	7	–
38	186	4	–	94	460	12	–	2	9	2	16	10½	0	9	–	7	10½
39	191	2	–	95	465	10	–	2	10	2	17	9	0	10	–	8	9
40	196	–	–	96	470	8	–	2	11	2	18	7½	0	11	–	9	7½
41	200	18	–	97	475	6	–	2	12	2	19	6	0	12	–	10	6
42	205	16	–	98	480	4	–	2	13	3	–	4½	0	13	–	11	4½
43	210	14	–	99	485	2	–	2	14	3	1	3	0	14	–	12	3
44	215	12	–	100	490	–	–	2	15	3	2	1½	0	15	–	13	1½
45	220	10	–	200	980	–	–	2	16	3	3	–	0	16	–	14	–
46	225	8	–	300	1470	–	–	2	17	3	3	10½	0	17	–	14	10½
47	230	6	–	400	1960	–	–	2	18	3	4	9	0	18	–	15	9
48	235	4	–	500	2450	–	–	2	19	3	5	7½	0	19	–	16	7½
49	240	2	–	600	2940	–	–	2	20	3	6	6	0	20	–	17	6
50	245	–	–	700	3430	–	–	2	21	3	7	4½	0	21	–	18	4½
51	249	18	–	800	3920	–	–	2	22	3	8	3	0	22	–	19	3
52	254	16	–	900	4410	–	–	2	23	3	9	1½	0	23	1	–	1½
53	259	14	–	1000	4900	–	–	2	24	3	10	–	0	24	1	1	–
54	264	12	–	2000	9800	–	–	2	25	3	10	10½	0	25	1	1	10½
55	269	10	–	3000	14,700	–	–	2	26	3	11	9	0	26	1	2	9
56	274	8	–	4000	19,600	–	–	2	27	3	12	7½	0	27	1	3	7½

100*s*. 4*d*. *per Cwt*. 10¾*d*. *per lb*. £100. 6*s*. 8*d*. *per Ton*.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	5	-	4	57	285	19	-	1	-	1	5	1	3	-	3	15	3
2	10	-	8	58	290	19	4	1	1	1	5	11¾	3	1	3	16	1¾
3	15	1	-	59	295	19	8	1	2	1	6	10½	3	2	3	17	-½
4	20	1	4	60	301	-	-	1	3	1	7	9¼	3	3	3	17	11¼
5	25	1	8	61	306	-	4	1	4	1	8	8	3	4	3	18	10
6	30	2	-	62	311	-	8	1	5	1	9	6¾	3	5	3	19	8¾
7	35	2	4	63	316	1	-	1	6	1	10	5½	3	6	4	-	7½
8	40	2	8	64	321	1	4	1	7	1	11	4¼	3	7	4	1	6¼
9	45	3	-	65	326	1	8	1	8	1	12	3	3	8	4	2	5
10	50	3	4	66	331	2	-	1	9	1	13	1¾	3	9	4	3	3¾
11	55	3	8	67	336	2	4	1	10	1	14	-½	3	10	4	4	2½
12	60	4	-	68	341	2	8	1	11	1	14	11¼	3	11	4	5	1¼
13	65	4	4	69	346	3	-	1	12	1	15	10	3	12	4	6	-
14	70	4	8	70	351	3	4	1	13	1	16	8¾	3	13	4	6	10¾
15	75	5	-	71	356	3	8	1	14	1	17	7½	3	14	4	7	9½
16	80	5	4	72	361	4	-	1	15	1	18	6¼	3	15	4	8	8¼
17	85	5	8	73	366	4	4	1	16	1	19	5	3	16	4	9	7
18	90	6	-	74	371	4	8	1	17	2	-	3¾	3	17	4	10	5¾
19	95	6	4	75	376	5	-	1	18	2	1	2½	3	18	4	11	4½
20	100	6	8	76	381	5	4	1	19	2	2	1¼	3	19	4	12	3¼
21	105	7	-	77	386	5	8	1	20	2	3	-	3	20	4	13	2
22	110	7	4	78	391	6	-	1	21	2	3	10¾	3	21	4	14	-¾
23	115	7	8	79	396	6	4	1	22	2	4	9½	3	22	4	14	11½
24	120	8	-	80	401	6	8	1	23	2	5	8¼	3	23	4	15	10¼
25	125	8	4	81	406	7	-	1	24	2	6	7	3	24	4	16	9
26	130	8	8	82	411	7	4	1	25	2	7	5¾	3	25	4	17	7¾
27	135	9	-	83	416	7	8	1	26	2	8	4½	3	26	4	18	6½
28	140	9	4	84	421	8	-	1	27	2	9	3¼	3	27	4	19	5¼
29	145	9	8	85	426	8	4	2	—	2	10	2					
30	150	10	-	86	431	8	8	2	1	2	11	-¾	0	1	-	-	10¾
31	155	10	4	87	436	9	-	2	2	2	11	11½	0	2	-	1	9½
32	160	10	8	88	441	9	4	2	3	2	12	10¼	0	3	-	2	8¼
33	165	11	-	89	446	9	8	2	4	2	13	9	0	4	-	3	7
34	170	11	4	90	451	10	-	2	5	2	14	7¾	0	5	-	4	5¾
35	175	11	8	91	456	10	4	2	6	2	15	6½	0	6	-	5	4½
36	180	12	-	92	461	10	8	2	7	2	16	5¼	0	7	-	6	3¼
37	185	12	4	93	466	11	-	2	8	2	17	4	0	8	-	7	2
38	190	12	8	94	471	11	4	2	9	2	18	2¾	0	9	-	8	-¾
39	195	13	-	95	476	11	8	2	10	2	19	1½	0	10	-	8	11½
40	200	13	4	96	481	12	-	2	11	3	-	-¼	0	11	-	9	10¼
41	205	13	8	97	486	12	4	2	12	3	-	11	0	12	-	10	9
42	210	14	-	98	491	12	8	2	13	3	1	9¾	0	13	-	11	7¾
43	215	14	4	99	496	13	-	2	14	3	2	8½	0	14	-	12	6½
44	220	14	8	100	501	13	4	2	15	3	3	7¼	0	15	-	13	5¼
45	225	15	-	200	1003	6	8	2	16	3	4	6	0	16	-	14	4
46	230	15	4	300	1505	-	-	2	17	3	5	4¾	0	17	-	15	2¾
47	235	15	8	400	2006	13	4	2	18	3	6	3½	0	18	-	16	1½
48	240	16	-	500	2508	6	8	2	19	3	7	2¼	0	19	-	17	-¼
49	245	16	4	600	3010	-	-	2	20	3	8	1	0	20	-	17	11
50	250	16	8	700	3511	13	4	2	21	3	8	11¾	0	21	-	18	9¾
51	255	17	-	800	4013	6	8	2	22	3	9	10½	0	22	-	19	8½
52	260	17	4	900	4515	-	-	2	23	3	10	9¼	0	23	1	-	7¼
53	265	17	8	1000	5016	13	4	2	24	3	11	8	0	24	1	1	6
54	270	18	-	2000	10,033	6	8	2	25	3	12	6¾	0	25	1	2	4¾
55	275	18	4	3000	15,050	-	-	2	26	3	13	5½	0	26	1	3	3½
56	280	18	8	4000	20,066	13	4	2	27	3	14	4¼	0	27	1	4	2¼

£102. 13*s.* 4*d.* per Ton. 11*d.* per lb. 102*s.* 8*d.* per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	5	2	8	57	292	12	–	1	–	1	5	8	3	–	3	17	–
2	10	5	4	58	297	14	8	1	1	1	6	7	3	1	3	17	11
3	15	8	–	59	302	17	4	1	2	1	7	6	3	2	3	18	10
4	20	10	8	60	308	–	–	1	3	1	8	5	3	3	3	19	9
5	25	13	4	61	313	2	8	1	4	1	9	4	3	4	4	–	8
6	30	16	–	62	318	5	4	1	5	1	10	3	3	5	4	1	7
7	35	18	8	63	323	8	–	1	6	1	11	2	3	6	4	2	6
8	41	1	4	64	328	10	8	1	7	1	12	1	3	7	4	3	5
9	46	4	–	65	333	13	4	1	8	1	13	–	3	8	4	4	4
10	51	6	8	66	338	16	–	1	9	1	13	11	3	9	4	5	3
11	56	9	4	67	343	18	8	1	10	1	14	10	3	10	4	6	2
12	61	12	–	68	349	1	4	1	11	1	15	9	3	11	4	7	1
13	66	14	8	69	354	4	–	1	12	1	16	8	3	12	4	8	–
14	71	17	4	70	359	6	8	1	13	1	17	7	3	13	4	8	11
15	77	–	–	71	364	9	4	1	14	1	18	6	3	14	4	9	10
16	82	2	8	72	369	12	–	1	15	1	19	5	3	15	4	10	9
17	87	5	4	73	374	14	8	1	16	2	–	4	3	16	4	11	8
18	92	8	–	74	379	17	4	1	17	2	1	3	3	17	4	12	7
19	97	10	8	75	385	–	–	1	18	2	2	2	3	18	4	13	6
20	102	13	4	76	390	2	8	1	19	2	3	1	3	19	4	14	5
21	107	16	–	77	395	5	4	1	20	2	4	–	3	20	4	15	4
22	112	18	8	78	400	8	–	1	21	2	4	11	3	21	4	16	3
23	118	1	4	79	405	10	8	1	22	2	5	10	3	22	4	17	2
24	123	4	–	80	410	13	4	1	23	2	6	9	3	23	4	18	1
25	128	6	8	81	415	16	–	1	24	2	7	8	3	24	4	19	–
26	133	9	4	82	420	18	8	1	25	2	8	7	3	25	4	19	11
27	138	12	–	83	426	1	4	1	26	2	9	6	3	26	5	–	10
28	143	14	8	84	431	4	–	1	27	2	10	5	3	27	5	1	9
29	148	17	4	85	436	6	8	2	—	2	11	4					
30	154	–	–	86	441	9	4	2	1	2	12	3	0	1	–	–	11
31	159	2	8	87	446	12	–	2	2	2	13	2	0	2	–	1	10
32	164	5	4	88	451	14	8	2	3	2	14	1	0	3	–	2	9
33	169	8	–	89	456	17	4	2	4	2	15	–	0	4	–	3	8
34	174	10	8	90	462	–	–	2	5	2	15	11	0	5	–	4	7
35	179	13	4	91	467	2	8	2	6	2	16	10	0	6	–	5	6
36	184	16	–	92	472	5	4	2	7	2	17	9	0	7	–	6	5
37	189	18	8	93	477	8	–	2	8	2	18	8	0	8	–	7	4
38	195	1	4	94	482	10	8	2	9	2	19	7	0	9	–	8	3
39	200	4	–	95	487	13	4	2	10	3	–	6	0	10	–	9	2
40	205	6	8	96	492	16	–	2	11	3	1	5	0	11	–	10	1
41	210	9	4	97	497	18	8	2	12	3	2	4	0	12	–	11	–
42	215	12	–	98	503	1	4	2	13	3	3	3	0	13	–	11	11
43	220	14	8	99	508	4	–	2	14	3	4	2	0	14	–	12	10
44	225	17	4	100	513	6	8	2	15	3	5	1	0	15	–	13	9
45	231	–	–	200	1026	13	4	2	16	3	6	–	0	16	–	14	8
46	236	2	8	300	1540	–	–	2	17	3	6	11	0	17	–	15	7
47	241	5	4	400	2053	6	8	2	18	3	7	10	0	18	–	16	6
48	246	8	–	500	2566	13	4	2	19	3	8	9	0	19	–	17	5
49	251	10	8	600	3080	–	–	2	20	3	9	8	0	20	–	18	4
50	256	13	4	700	3593	6	8	2	21	3	10	7	0	21	–	19	3
51	261	16	–	800	4106	13	4	2	22	3	11	6	0	22	1	–	2
52	266	18	8	900	4620	–	–	2	23	3	12	5	0	23	1	1	1
53	272	1	4	1000	5133	6	8	2	24	3	13	4	0	24	1	2	–
54	277	4	–	2000	10,266	13	4	2	25	3	14	3	0	25	1	2	11
55	282	6	8	3000	15,400	–	–	2	26	3	15	2	0	26	1	3	10
56	287	9	4	4000	20,533	6	8	2	27	3	16	1	0	27	1	4	9

105*s.* *per Cwt.* 11¼*d.* *per lb.* £105. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	5	5	–	57	299	5	–	1	–	1	6	3	3	–	3	18	9
2	10	10	–	58	304	10	–	1	1	1	7	2¼	3	1	3	19	8
3	15	15	–	59	309	15	–	1	2	1	8	1½	3	2	4	–	7½
4	21	–	–	60	315	–	–	1	3	1	9	–¾	3	3	4	1	6¾
5	26	5	–	61	320	5	–	1	4	1	10	–	3	4	4	2	6
6	31	10	–	62	325	10	–	1	5	1	10	11¼	3	5	4	3	5¼
7	36	15	–	63	330	15	–	1	6	1	11	10½	3	6	4	4	4½
8	42	–	–	64	336	–	–	1	7	1	12	9¾	3	7	4	5	3¾
9	47	5	–	65	341	5	–	1	8	1	13	9	3	8	4	6	3
10	52	10	–	66	346	10	–	1	9	1	14	8¼	3	9	4	7	2¼
11	57	15	–	67	351	15	–	1	10	1	15	7½	3	10	4	8	1½
12	63	–	–	68	357	–	–	1	11	1	16	6¾	3	11	4	9	–¾
13	68	5	–	69	362	5	–	1	12	1	17	6	3	12	4	10	–
14	73	10	–	70	367	10	–	1	13	1	18	5¼	3	13	4	10	11¼
15	78	15	–	71	372	15	–	1	14	1	19	4½	3	14	4	11	10½
16	84	–	–	72	378	–	–	1	15	2	–	3¾	3	15	4	12	9¾
17	89	5	–	73	383	5	–	1	16	2	1	3	3	16	4	13	9
18	94	10	–	74	388	10	–	1	17	2	2	2¼	3	17	4	14	8¼
19	99	15	–	75	393	15	–	1	18	2	3	1½	3	18	4	15	7½
20	105	–	–	76	399	–	–	1	19	2	4	–¾	3	19	4	16	6¾
21	110	5	–	77	404	5	–	1	20	2	5	–	3	20	4	17	6
22	115	10	–	78	409	10	–	1	21	2	5	11¼	3	21	4	18	5¼
23	120	15	–	79	414	15	–	1	22	2	6	10½	3	22	4	19	4½
24	126	–	–	80	420	–	–	1	23	2	7	9¾	3	23	5	–	3¾
25	131	5	–	81	425	5	–	1	24	2	8	9	3	24	5	1	3
26	136	10	–	82	430	10	–	1	25	2	9	8¼	3	25	5	2	2¼
27	141	15	–	83	435	15	–	1	26	2	10	7½	3	26	5	3	1½
28	147	–	–	84	441	–	–	1	27	2	11	6¾	3	27	5	4	–¾
29	152	5	–	85	446	5	–	2	—	2	12	6					
30	157	10	–	86	451	10	–	2	1	2	13	5¼	0	1	–	–	11¼
31	162	15	–	87	456	15	–	2	2	2	14	4½	0	2	–	1	10½
32	168	–	–	88	462	–	–	2	3	2	15	3¾	0	3	–	2	9¾
33	173	5	–	89	467	5	–	2	4	2	16	3	0	4	–	3	9
34	178	10	–	90	472	10	–	2	5	2	17	2¼	0	5	–	4	8¼
35	183	15	–	91	477	15	–	2	6	2	18	1½	0	6	–	5	7½
36	189	–	–	92	483	–	–	2	7	2	19	–¾	0	7	–	6	6¾
37	194	5	–	93	488	5	–	2	8	3	–	–	0	8	–	7	6
38	199	10	–	94	493	10	–	2	9	3	–	11¼	0	9	–	8	5¼
39	204	15	–	95	498	15	–	2	10	3	1	10½	0	10	–	9	4½
40	210	–	–	96	504	–	–	2	11	3	2	9¾	0	11	–	10	3¾
41	215	5	–	97	509	5	–	2	12	3	3	9	0	12	–	11	3
42	220	10	–	98	514	10	–	2	13	3	4	8¼	0	13	–	12	2¼
43	225	15	–	99	519	15	–	2	14	3	5	7½	0	14	–	13	1½
44	231	–	–	100	525	–	–	2	15	3	6	6¾	0	15	–	14	–¾
45	236	5	–	200	1050	–	–	2	16	3	7	6	0	16	–	15	–
46	241	10	–	300	1575	–	–	2	17	3	8	5¼	0	17	–	15	11¼
47	246	15	–	400	2100	–	–	2	18	3	9	4½	0	18	–	16	10½
48	252	–	–	500	2625	–	–	2	19	3	10	3¾	0	19	–	17	9¾
49	257	5	–	600	3150	–	–	2	20	3	11	3	0	20	–	18	9
50	262	10	–	700	3675	–	–	2	21	3	12	2¼	0	21	–	19	8¼
51	267	15	–	800	4200	–	–	2	22	3	13	1½	0	22	1	–	7½
52	273	–	–	900	4725	–	–	2	23	3	14	–¾	0	23	1	1	6¾
53	278	5	–	1000	5250	–	–	2	24	3	15	–	0	24	1	2	6
54	283	10	–	2000	10,500	–	–	2	25	3	15	11¼	0	25	1	3	5¼
55	288	15	–	3000	15,750	–	–	2	26	3	16	10½	0	26	1	4	4½
56	294	–	–	4000	21,000	–	–	2	27	3	17	9¾	0	27	1	5	3¾

£107. 6s. 8d. per Ton. 11½d. per lb. 107s. 4d. per Cwt.

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	5	7	4	57	305	18	–	1	–	1	6	10	3	–	4	–	6
2	10	14	8	58	311	5	4	1	1	1	7	9½	3	1	4	1	5½
3	16	2	–	59	316	12	8	1	2	1	8	9	3	2	4	2	5
4	21	9	4	60	322	–	–	1	3	1	9	8½	3	3	4	3	4½
5	26	16	8	61	327	7	4	1	4	1	10	8	3	4	4	4	4
6	32	4	–	62	332	14	8	1	5	1	11	7½	3	5	4	5	3½
7	37	11	4	63	338	2	–	1	6	1	12	7	3	6	4	6	3
8	42	18	8	64	343	9	4	1	7	1	13	6½	3	7	4	7	2½
9	48	6	–	65	348	16	8	1	8	1	14	6	3	8	4	8	2
10	53	13	4	66	354	4	–	1	9	1	15	5½	3	9	4	9	1½
11	59	–	8	67	359	11	4	1	10	1	16	5	3	10	4	10	1
12	64	8	–	68	364	18	8	1	11	1	17	4½	3	11	4	11	–½
13	69	15	4	69	370	6	–	1	12	1	18	4	3	12	4	12	–
14	75	2	8	70	375	13	4	1	13	1	19	3½	3	13	4	12	11½
15	80	10	–	71	381	–	8	1	14	2	–	3	3	14	4	13	11
16	85	17	4	72	386	8	–	1	15	2	1	2½	3	15	4	14	10½
17	91	4	8	73	391	15	4	1	16	2	2	2	3	16	4	15	10
18	96	12	–	74	397	2	8	1	17	2	3	1½	3	17	4	16	9½
19	101	19	4	75	402	10	-	1	18	2	4	1	3	18	4	17	9
20	107	6	8	76	407	17	4	1	19	2	5	–½	3	19	4	18	8½
21	112	14	–	77	413	4	8	1	20	2	6	–	3	20	4	19	8
22	118	1	4	78	418	12	–	1	21	2	6	11½	3	21	5	–	7½
23	123	8	8	79	423	19	4	1	22	2	7	11	3	22	5	1	7
24	128	16	–	80	429	6	8	1	23	2	8	10½	3	23	5	2	6½
25	134	3	4	81	434	14	–	1	24	2	9	10	3	24	5	3	6
26	139	10	8	82	440	1	4	1	25	2	10	9½	3	25	5	4	5½
27	144	18	–	83	445	8	8	1	26	3	11	9	3	26	5	5	5
28	150	5	4	84	450	16	–	1	27	2	12	8½	3	27	5	6	4½
29	155	12	8	85	456	3	4	2	—	2	13	8					
30	161	–	–	86	461	10	8	2	1	2	14	7½	0	1	–	–	11½
31	166	7	4	87	466	18	–	2	2	2	15	7	0	2	–	1	11
32	171	14	8	88	472	5	4	2	3	2	16	6½	0	3	–	2	10½
33	177	2	–	89	477	12	8	2	4	2	17	6	0	4	–	3	10
34	182	9	4	90	483	–	–	2	5	2	18	5½	0	5	–	4	9½
35	187	16	8	91	488	7	4	2	6	2	19	5	0	6	–	5	9
36	193	4	–	92	493	14	8	2	7	3	–	4½	0	7	–	6	8½
37	198	11	4	93	499	2	–	2	8	3	1	4	0	8	–	7	8
38	203	18	8	94	504	9	4	2	9	3	2	3½	0	9	–	8	7½
39	209	6	–	95	509	16	8	2	10	3	3	3	0	10	–	9	7
40	214	13	4	96	515	4	–	2	11	3	4	2½	0	11	–	10	6½
41	220	–	8	97	520	11	4	2	12	3	5	2	0	12	–	11	6
42	225	8	–	98	525	18	8	2	13	3	6	1½	0	13	–	12	5½
43	230	15	4	99	531	6	–	2	14	3	7	1	0	14	–	13	5
44	236	2	8	100	536	13	4	2	15	3	8	–½	0	15	–	14	4½
45	241	10	–	200	1073	6	8	2	16	3	9	–	0	16	–	15	4
46	246	17	4	300	1610	–	–	2	17	3	9	11½	0	17	–	16	3½
47	252	4	8	400	2146	13	4	2	18	3	10	11	0	18	–	17	3
48	257	12	–	500	2683	6	8	2	19	3	11	10½	0	19	–	18	2½
49	262	19	4	600	3220	–	–	2	20	3	12	10	0	20	–	19	2
50	268	6	8	700	3756	13	4	2	21	3	13	9½	0	21	1	–	1½
51	273	14	–	800	4293	6	8	2	22	3	14	9	0	22	1	1	1
52	279	1	4	900	4830	–	–	2	23	3	15	8½	0	23	1	2	–½
53	284	8	8	1000	5366	13	4	2	24	3	16	8	0	24	1	3	–
54	289	16	–	2000	10,733	6	8	2	25	3	17	7½	0	25	1	3	11½
55	295	3	4	3000	16,100	–	–	2	26	3	18	7	0	26	1	4	11
56	300	10	8	4000	21,466	13	4	2	27	3	19	6½	0	27	1	5	10½

109*s*. 8*d*. *per Cwt.* 11¾*d*. *per lb.* £109. 13*s*. 4*d*. *per Ton.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	5	9	8	57	312	11	–	1	–	1	7	5	3	–	4	2	3
2	10	19	4	58	318	–	8	1	1	1	8	4¾	3	1	4	3	2¾
3	16	9	–	59	323	10	4	1	2	1	9	4½	3	2	4	4	2½
4	21	18	8	60	329	–	–	1	3	1	10	4¼	3	3	4	5	2¼
5	27	8	4	61	334	9	8	1	4	1	11	4	3	4	4	6	2
6	32	18	–	62	339	19	4	1	5	1	12	3¾	3	5	4	7	1¾
7	38	7	8	63	345	9	–	1	6	1	13	3½	3	6	4	8	1½
8	43	17	4	64	350	18	8	1	7	1	14	3¼	3	7	4	9	1¼
9	49	7	–	65	356	8	4	1	8	1	15	3	3	8	4	10	1
10	54	16	8	66	361	18	–	1	9	1	16	2¾	3	9	4	11	–¾
11	60	6	4	67	367	7	8	1	10	1	17	2½	3	10	4	12	–½
12	65	16	–	68	372	17	4	1	11	1	18	2¼	3	11	4	13	–¼
13	71	5	8	69	378	7	–	1	12	1	19	2	3	12	4	14	–
14	76	15	4	70	383	16	8	1	13	2	–	1¾	3	13	4	14	11¾
15	82	5	–	71	389	6	4	1	14	2	1	1½	3	14	4	15	11½
16	87	14	8	72	394	16	–	1	15	2	2	1¼	3	15	4	16	11¼
17	93	4	4	73	400	5	8	1	16	2	3	1	3	16	4	17	11
18	98	14	–	74	405	15	4	1	17	2	4	–¾	3	17	4	18	10¾
19	104	3	8	75	411	5	–	1	18	2	5	–½	3	18	4	19	10½
20	109	13	4	76	416	14	8	1	19	2	6	–¼	3	19	5	–	10¼
21	115	3	–	77	422	4	4	1	20	2	7	–	3	20	5	1	10
22	120	12	8	78	427	14	–	1	21	2	7	11¾	3	21	5	2	9¾
23	126	2	4	79	433	3	8	1	22	2	8	11½	3	22	5	3	9½
24	131	12	–	80	438	13	4	1	23	2	9	11¼	3	23	5	4	9¼
25	137	1	8	81	444	3	–	1	24	2	10	11	3	24	5	5	9
26	142	11	4	82	449	12	8	1	25	2	11	10¾	3	25	5	6	8¾
27	148	1	–	83	455	2	4	1	26	2	12	10½	3	26	5	7	8½
28	153	10	8	84	460	12	–	1	27	2	13	10¼	3	27	5	8	8¼
29	159	–	4	85	466	1	8	2	—	2	14	10					
30	164	10	–	86	471	11	4	2	1	2	15	9¾	0	1	–	–	11¾
31	169	19	8	87	477	1	–	2	2	2	16	9½	0	2	–	1	11½
32	175	9	4	88	482	10	8	2	3	2	17	9¼	0	3	–	2	11¼
33	180	19	–	89	488	–	4	2	4	2	18	9	0	4	–	3	11
34	186	8	8	90	493	10	–	2	5	2	19	8¾	0	5	–	4	10¾
35	191	18	4	91	498	19	8	2	6	3	–	8½	0	6	–	5	10½
36	197	8	–	92	504	9	4	2	7	3	1	8¼	0	7	–	6	10¼
37	202	17	8	93	509	19	–	2	8	3	2	8	0	8	–	7	10
38	208	7	4	94	515	8	8	2	9	3	3	7¾	0	9	–	8	9¾
39	213	17	–	95	520	18	4	2	10	3	4	7½	0	10	–	9	9½
40	219	6	8	96	526	8	–	2	11	3	5	7¼	0	11	–	10	9¼
41	224	16	4	97	531	17	8	2	12	3	6	7	0	12	–	11	9
42	230	6	–	98	537	7	4	2	13	3	7	6¾	0	13	–	12	8¾
43	235	15	8	99	542	17	–	2	14	3	8	6½	0	14	–	13	8½
44	241	5	4	100	548	6	8	2	15	3	9	6¼	0	15	–	14	8¼
45	246	15	–	200	1096	13	4	2	16	3	10	6	0	16	–	15	8
46	252	4	8	300	1645	–	–	2	17	3	11	5¾	0	17	–	16	7¾
47	257	14	4	400	2193	6	8	2	18	3	12	5½	0	18	–	17	7½
48	263	4	–	500	2741	13	4	2	19	3	13	5¼	0	19	–	18	7¼
49	268	13	8	600	3290	–	–	2	20	3	14	5	0	20	–	19	7
50	274	3	4	700	3838	6	8	2	21	3	15	4¾	0	21	1	–	6¾
51	279	13	–	800	4386	13	4	2	22	3	16	4½	0	22	1	1	6½
52	285	2	8	900	4935	–	–	2	23	3	17	4¼	0	23	1	2	6¼
53	290	12	4	1000	5483	6	8	2	24	3	18	4	0	24	1	3	6
54	296	2	–	2000	10,966	13	4	2	25	3	19	3¾	0	25	1	4	5¾
55	301	11	8	3000	16,450	–	–	2	26	4	–	3½	0	26	1	5	5½
56	307	1	4	4000	21,933	6	8	2	27	4	1	3¼	0	27	1	6	5¼

£112. per Ton. 1*s*. *per lb.* 112*s*. *per Cwt.*

Cwt	£.	s.	d.	Cwt.	£.	s.	d.	qr.	lb.	£.	s.	d.	qr.	lb.	£.	s.	d.
1	5	12	-	57	319	4	-	1	-	1	8	-	3	-	4	4	-
2	11	4	-	58	324	16	-	1	1	1	9	-	3	1	4	5	-
3	16	16	-	59	330	8	-	1	2	1	10	-	3	2	4	6	-
4	22	8	-	60	336	-	-	1	3	1	11	-	3	3	4	7	-
5	28	-	-	61	341	12	-	1	4	1	12	-	3	4	4	8	-
6	33	12	-	62	347	4	-	1	5	1	13	-	3	5	4	9	-
7	39	4	-	63	352	16	-	1	6	1	14	-	3	6	4	10	-
8	44	16	-	64	358	8	-	1	7	1	15	-	3	7	4	11	-
9	50	8	-	65	364	-	-	1	8	1	16	-	3	8	4	12	-
10	56	-	-	66	369	12	-	1	9	1	17	-	3	9	4	13	-
11	61	12	-	67	375	4	-	1	10	1	18	-	3	10	4	14	-
12	67	4	-	68	380	16	-	1	11	1	19	-	3	11	4	15	-
13	72	16	-	69	386	8	-	1	12	2	-	-	3	12	4	16	-
14	78	8	-	70	392	-	-	1	13	2	1	-	3	13	4	17	-
15	84	-	-	71	397	12	-	1	14	2	2	-	3	14	4	18	-
16	89	12	-	72	403	4	-	1	15	2	3	-	3	15	4	19	-
17	95	4	-	73	408	16	-	1	16	2	4	-	3	16	5	-	-
18	100	16	-	74	414	8	-	1	17	2	5	-	3	17	5	1	-
19	106	8	-	75	420	-	-	1	18	2	6	-	3	18	5	2	-
20	112	-	-	76	425	12	-	1	19	2	7	-	3	19	5	3	-
21	117	12	-	77	431	4	-	1	20	2	8	-	3	20	5	4	-
22	123	4	-	78	436	16	-	1	21	2	9	-	3	21	5	5	-
23	128	16	-	79	442	8	-	1	22	2	10	-	3	22	5	6	-
24	134	8	-	80	448	-	-	1	23	2	11	-	3	23	5	7	-
25	140	-	-	81	453	12	-	1	24	2	12	-	3	24	5	8	-
26	145	12	-	82	459	4	-	1	25	2	13	-	3	25	5	9	-
27	151	4	-	83	464	16	-	1	26	2	14	-	3	26	5	10	-
28	156	16	-	84	470	8	-	1	27	2	15	-	3	27	5	11	-
29	162	8	-	85	476	-	-	2	—	2	16	-					
30	168	-	-	86	481	12	-	2	1	2	17	-	0	1	-	1	-
31	173	12	-	87	487	4	-	2	2	2	18	-	0	2	-	2	-
32	179	4	-	88	492	16	-	2	3	2	19	-	0	3	-	3	-
33	184	16	-	89	498	8	-	2	4	3	-	-	0	4	-	4	-
34	190	8	-	90	504	-	-	2	5	3	1	-	0	5	-	5	-
35	196	-	-	91	509	12	-	2	6	3	2	-	0	6	-	6	-
36	201	12	-	92	515	4	-	2	7	3	3	-	0	7	-	7	-
37	207	4	-	93	520	16	-	2	8	3	4	-	0	8	-	8	-
38	212	16	-	94	526	8	-	2	9	3	5	-	0	9	-	9	-
39	218	8	-	95	532	-	-	2	10	3	6	-	0	10	-	10	-
40	224	-	-	96	537	12	-	2	11	3	7	-	0	11	-	11	-
41	229	12	-	97	543	4	-	2	12	3	8	-	0	12	-	12	-
42	235	4	-	98	548	16	-	2	13	3	9	-	0	13	-	13	-
43	240	16	-	99	554	8	-	2	14	3	10	-	0	14	-	14	-
44	246	8	-	100	560	-	-	2	15	3	11	-	0	15	-	15	-
45	252	-	-	200	1120	-	-	2	16	3	12	-	0	16	-	16	-
46	257	12	-	300	1680	-	-	2	17	3	13	-	0	17	-	17	-
47	263	4	-	400	2240	-	-	2	18	3	14	-	0	18	-	18	-
48	268	16	-	500	2800	-	-	2	19	3	15	-	0	19	-	19	-
49	274	8	-	600	3360	-	-	2	20	3	16	-	0	20	1	-	-
50	280	-	-	700	3920	-	-	2	21	3	17	-	0	21	1	1	-
51	285	12	-	800	4480	-	-	2	22	3	18	-	0	22	1	2	-
52	291	4	-	900	5040	-	-	2	23	3	19	-	0	23	1	3	-
53	296	16	-	1000	5600	-	-	2	24	4	-	-	0	24	1	4	-
54	302	8	-	2000	11,200	-	-	2	25	4	1	-	0	25	1	5	-
55	308	-	-	3000	16,800	-	-	2	26	4	2	-	0	26	1	6	-
56	313	12	-	4000	22,400	-	-	2	27	4	3	-	0	27	1	7	-

EXPLANATIONS OF THE CHARACTERS

USED IN THE FOLLOWING CALCULATIONS.

$+$ Signifies Addition, as $5 + 3$ is 8.
$-$ .... Subtraction, as $5 - 3$ is 2.
$\times$ .... Multiplication, as 5×3 is 15.
$\div$ .... Division, $15 \div 3$ is 5, or $\frac{15}{3}$ is 5.
: :: : .... Proportion, as 2 : (is to) 3 : : (so is) 4 : (to) 6.
$=$ .... Equality, as $5 + 3 = 8$.
$\sqrt{}$ .... Square Root, as $\sqrt{9} = 3$.
$\sqrt[3]{}$ .... Cube Root, as $\sqrt[3]{27} = 3$.

3^2 Signifies that 3 is to be squared, thus $3^2 = 9$.
3^3 .... 3 is to be cubed, thus $3^3 = 27$.
The Bar signifies that two numbers are to be taken together, as $3 \times \overline{5 + 3} = 24$.
$\sqrt{\overline{8^2 - 5^2}} = 6{\cdot}2449$; signifies 8 squared, minus 5 squared, the square root of the remainder $= 6{\cdot}2449$.
$\sqrt[3]{\frac{24 \times 10}{20}} = 2{\cdot}2894$; signifies 24 multiplied by 10, and divided by 20, the cube root of the quotient $= 2{\cdot}2894$.

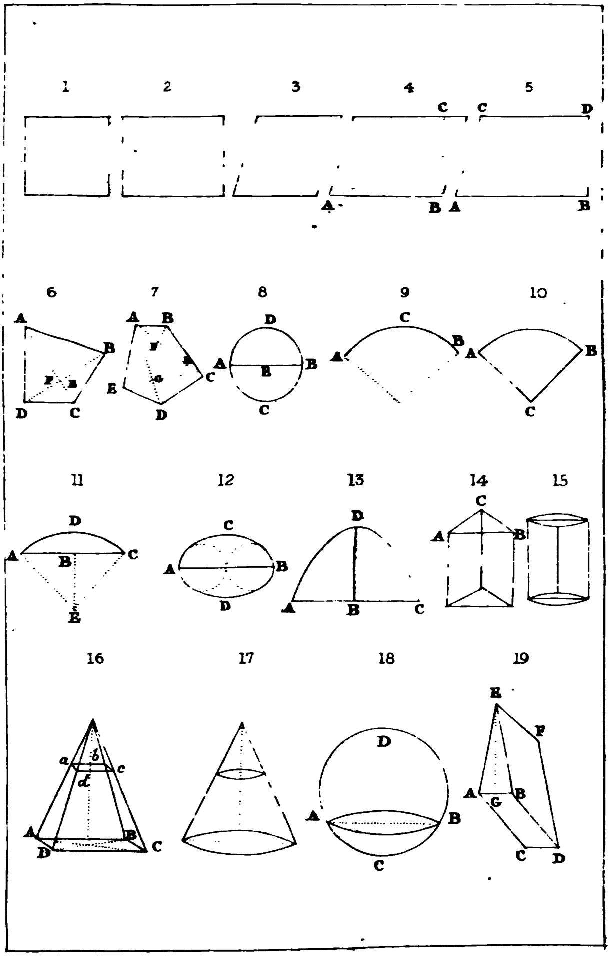
EXPLANATION OF THE PLATE.

No. 1. A Square.
2. A Rectangle.
3. A Rhombus.
4. A Rhomboid.
5. A Trapezoid.
6. A Trapezium.
7. An Irregular Polygon.
8. A Circle, A E the radius, A E B the diameter, A C B D the circumference.
9. An Arc of a Circle, A C B.
10. A Sector of a Circle, A C B.
11. A Segment of a Circle, A B C D.
12. An Ellipsis or Oval, A B the long diameter, C D the short diameter.
13. A Parabola, A B C the base, B D the perpendicular height.
14. A Prism, A B C the perimeter; or, the circumference of the end of a cylinder is the perimeter of that cylinder.
15. A Cylinder.
16. A Pyramid, A B C D the base; A B C D *a b c d* the frustum.
17. A Cone.
18. A Sphere, A B C D the circumference, A B C a segment.
19. A Wedge.

SIZES OF DRAWING PAPERS.

	Inches.		
Demy	20	×	15
Medium	22½	×	17
Royal	24	×	19¼
Super-Royal	27	×	19½
Imperial	30	×	22
Elephant	28⅜	×	23⅛
Colombier	34	×	23
Atlas	33¼	×	26¼
Double Elephant	40	×	27
Antiquarian	53	×	31
Extra ditto	56	×	38
Emperor	66	×	47

MENSURATION.



COMPENDIUM OF MECHANICS.

WEIGHTS & MEASURES.

IMPERIAL STANDARD WEIGHTS AND MEASURES.

STANDARD YARD.

The Standard Yard, when compared with a Pendulum vibrating seconds of mean time in the latitude of London, in a vacuum at the level of the sea, is in the proportion as 36 to 39 inches, and 1393 ten thousandth parts of an inch.

The Rood of Land shall contain 1210 square yards, an Acre 4840 square yards, or 160 square perches, poles, or rods.

STANDARD POUND.

A Cubic Inch of distilled water, weighed in air by brass weights, at the temperature of 62 degrees Fahrenheit, the barometer being at 30 inches, is equal to 252 grains and 458 thousandth parts of a grain, of which the Standard Troy Pound shall contain 5760.

STANDARD GALLON.

The Standard Gallon shall contain 10 Pounds Avoirdupois weight of distilled water weighed in air, at the temperature of 62° Fahrenheit, the barometer being at 30 inches. It shall contain 277¼ cubic inches.

STANDARD FOR HEAPED MEASURE.

The Standard Bushel, for Heaped Measure, shall contain 80 pounds Avoirdupois weight. It shall be 19½ inches diameter, and 7·4272 inches deep inside, with a plain and even bottom, and contain 2218·192 cubic inches.

1. MEASURES OF LENGTH.

12 inches = 1 foot.
3 feet = 1 yard.
5½ yards = 1 pole or rod.
40 poles = 1 furlong.
8 furlongs, 1760 yards, or 5280 feet = 1 mile.

3 miles = 1 league, marked lea.
2¾ do. = 1 French league.
3⅔ do. = 1 Spanish league.
4 do. = 1 German mile.
3¼ do. = 1 Dutch mile.

$\frac{11}{12}$ mile = 1 Italian mile.
¾ do. = 1 Russian verst.
$1\frac{3}{22}$ do. = 1 Scotch mile.
$1\frac{3}{11}$ do. = 1 Irish mile.
$69\frac{1}{15}$ miles nearly = 1 Deg., marked °

VARIOUS FRENCH MEASURES OF FREQUENT REFERENCE.

A point, is equal to	·0148025 English inches.	
A line	·088815	„
A millemetre	·039371	„
A centimetre	·39371	„
An inch (pouce)	1·06578	„
A decimetre	3·9371	„
A foot	12·78933	„
A metre	39·371	„ or 3·2809 English ft.
A toise (fathom)	6·394 English feet.	
A league	14591·1	„ or 4863·7 English yards.
A square inch	1·13582 English square inches.	
A cubic inch	1·21063 „ cubic „	
A cubic metre	35·316 „ cubic feet.	

2. MEASURES OF SURFACE, OR SQUARE MEASURE.

144 square inches = 1 square foot.
9 square feet = 1 square yard.
30¼ square yards = 1 square pole.
40 square poles = 1 square rood.
4 roods, or 4840 square yards = 1 square acre.
640 square acres = 1 square mile.
1089 Scotch acres = 1369 English acres.

3. MEASURES OF SOLIDITY, OR CUBIC MEASURE.

1728 cubic inches = 1 cubic foot.
27 cubic feet = 1 cubic yard.
166⅜ cubic yards = 1 cubic pole.
64,000 cubic poles = 1 cubic furlong.
512 cubic furlongs = 1 cubic mile.

4. MEASURES OF CAPACITY.

LIQUIDS.

8·665 cubic inches = $\frac{5}{16}$ lb. of water = 1 gill.*
4 gills = 34·659 do. = 1¼ lb. do. = 1 pint.
2 pints = 69·318 do = 2½ lbs. do. = 1 quart.
4 quarts = 277¼ do. = 10 lbs. do. = 1 gallon.

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* Called also, in the north of England, a Jack or Noggin. In some counties, the *Half-pint* is erroneously termed *a Gill.*

GRAIN, FRUIT, ETC.

2 gallons . . . . . . = 1 peck.
4 pecks, or 2218·192 cubic inches . . = 1 bushel.
8 bushels . . . . . . = 1 quarter.
5 quarters . . . . . = 1 load.

5. MEASURES OF WEIGHT.

TROY.

24 grains . . . . . . = 1 pennyweight.
20 pennyweights . . . . . = 1 ounce.
12 ounces . . . . . . = 1 pound.

AVOIRDUPOIS.

27·34375 troy grains . . . . = 1 dram.
16 drams . . . . . . = 1 ounce.
16 ounces . . . . . . = 1 pound.
14 pounds . . . . . = 1 stone.
2 stones . . . . . . = 1 quarter.
4 quarters, or 112 lbs. . . . = 1 cwt.
20 cwt. . . . . . . = 1 ton.

BRITISH SPECIAL MEASURES.

1. LINEAL MEASURES FOR LAND.

7·92 inches . . . . . . = 1 link.
100 links, or 22 yards . . . . = 1 chain.
80 chains . . . . . . = 1 mile.
69·121 miles . . . . . = 1 geog. degree.

2. SQUARE MEASURES FOR LAND.

62·7264 square inches . . . . = 1 square link.
10,000 square links . . . . = 1 square chain.
10 square chains . . . . . = 1 square acre.

3. NAUTICAL MEASURES.

6082·66 feet . . . . . . = 1 nautical mile.
3 miles . . . . . . = 1 league.
20 leagues . . . . . . = 1 degree.
360 degrees . . . . . = the earth's circumference.

MISCELLANEOUS SPECIAL MEASURES.

6 lineal feet . . . . = 1 fathom.
100 square feet . . . . = 1 square of flooring.
272 square feet, at 14 inches in thickness = 1 rod of brickwork.
600 square feet of inch boards . = 1 load.
40 cubic feet of round timber }
50 cubic feet of hewn timber } . = 1 ton or load.
40 cubic feet . . . . = 1 ton of shipping.
120 deals . . . . = 1 hundred.
120 nails . . . . = 1 hundred.
1200 do. . . . . = 1 thousand.

MISCELLANEOUS SPECIAL MEASURES.—*Continued.*

500 bricks = 1 load.
32 bushels of lime = 1 do.
36 do. sand = 1 do.
22 cwt. = 1 fodder of lead (Stockton).
21 do. = 1 do. do. (Newcastle).
19½ do. = 1 do. do. (London).
108 cubic feet = 1 stack of wood.
42 gallons = 1 tierce
63 do. = 1 hogshead old
84 do. = 1 puncheon wine
126 do. = 1 pipe measure.
252 do. = 1 tun
36 do. = 1 barrel
54 do. = 1 hogshead old ale
72 do. = 1 puncheon measure.
108 do. = 1 butt
36 bushels, or 28 cwt. = 1 chaldron of coals (London).
53 cwt. = 1 do. do. (Newcastle).
88 lbs. = 1 bushel of coal.
56 do. = 1 do. flour or salt.
60 do. = 1 do. wheat.
47 do. = 1 do. barley.
38 do. = 1 do. oats.

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1 gallon of sea water = 10·32 lbs. avoirdupois.
1 „ oil = 9·32 „
1 „ proof spirits = 9·3 „

The old ale gallon contained 282 cubic inches; and the old wine gallon 231.

The French litre, or standard measure of capacity for liquids, contains 61·028 cubic inches, or about ·453 of the imperial gallon.

WEIGHT OF WATER.

Maximum density of water 42° Fahrenheit.
Freezing point 32° Fahrenheit, at which point it has expanded $\frac{1}{17}$th of its original bulk.

62·5 lbs. avoirdupois = the weight of 1 cubic foot.
·03617 = 1 „ inch.
·434 = 1 lineal foot 1 inch square.
49·1 = 1 cylindrical foot.
·02842 = 1 „ inch.
·341 = 1 lineal foot 1 inch diameter.
11·2 imperial gallons = 1 cwt.
224· = 1 ton.
1·8 cubic feet = 1 cwt.
35·84 = 1 ton.
1 cubic foot of water = 6¼ imperial gallons, and
1 cylindrical foot = about 5.

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1 circular inch = 1·273 square inch.
1 cubic foot = 2200· cylindrical inches.
1 do. = 3300· spherical do.
1 do. = 6600· conical do.

DECIMAL FRACTIONS.

NUMERATION.

DEFINITIONS.

In Decimal Fractions the integer, or whole thing, as one pound, one yard, one gallon, &c., is supposed to be divided into ten equal parts, and those parts into tenths, and so on, without end.

So that the denominator of a decimal being always known to consist of a unit, with as many ciphers as the numerator has places, is therefore never set down; the parts being only distinguished from the whole numbers by a comma or dot prefixed; thus, ·5 stands for $\frac{5}{10}$, ·25 for $\frac{25}{100}$, ·123 for $\frac{123}{1000}$.

But the different value of figures appears plainer by the following Table:—

Whole numbers.							Decimal parts.					
7	6	5	4	3	2	1	2	3	4	5	6	7
Millions.	*C. Thousands.*	*X. Thousands.*	*Thousands.*	*Hundreds.*	*Tens.*	*Units.*	*Parts of Tens.*	*Parts of Hundreds.*	*Parts of Thousands.*	*Parts of X. Thousands.*	*Parts of C. Thousands.*	*Parts of Millions.*

From which it plainly appears, that as whole numbers increase in a tenfold proportion to the left hand, decimal parts decrease in a tenfold proportion to the right hand: so that ciphers placed before decimal parts decrease their value by removing them farther from the dot, or unit's place, thus, ·5 is 5 parts of 10, or $\frac{5}{10}$; ·05 is 5 parts of 100, or $\frac{5}{100}$; ·005 is 5 parts of a 1000, or $\frac{5}{1000}$; ·0005 is 5 parts of 10000, or $\frac{5}{10000}$. But ciphers after decimal parts do not alter the value; for ·5, ·50, ·500, &c., are each but $\frac{5}{10}$ of the unit.

A **Finite Decimal** is that which ends at a certain number of places; but an **Infinite** is that which no where ends.

A **Recurring Decimal** is that wherein one or more figures are continually repeated, as 2·75222.

And 52·275275 is called a **Compound Recurring Decimal.**

Note.—A finite decimal may be considered as infinite, by making ciphers to recur; for they do not alter the value of the decimal.

In all operations, if the result consists of several nines reject them, and make the next superior place a unit more; thus, for 26·25999 write 26·26.

In all circulating numbers, *dot* the last figure, thus, as in $86{\cdot}5466\dot{6}$.

ADDITION OF DECIMALS.

Rule.—In setting down the numbers to be added, place the figures underneath those of the same value; to perform which, the dots must stand in a direct line under each other; then add them as in whole numbers.

Example.—Add 72·5, 32·07, 2·1574, 371·4, and 2·75, thus,

$$\begin{array}{r@{\cdot}l} 72 & 5 \\ 32 & 07 \\ 2 & 1574 \\ 371 & 4 \\ 2 & 75 \\ \hline 480 & 8774 \text{ Ans.} \end{array}$$

SUBTRACTION OF DECIMALS.

Rule.—Arrange the numbers under each other, with the points in a direct line, as in addition, and subtract the less from the greater.

Example.—Subtract 76·4075 from 270·2; thus,

$$\begin{array}{r@{\cdot}l} 270 & 2 \\ 76 & 4075 \\ \hline 193 & 7925 \text{ Ans.} \end{array}$$

MULTIPLICATION OF DECIMALS.

Rule.—Arrange the multiplier under the multiplicand, as in whole numbers, and multiply them together. From the product, reckoning from right to left, point off as many figures for decimals as there are decimals in the multiplicand and multiplier together; but if there be not so many figures in the product, prefix ciphers to make up the deficiency.

Example.—Multiply 54·368 by 4·5864; thus,

$$\begin{array}{r}
54{\cdot}368\\
4{\cdot}5864\\
\hline
217472\\
326208\\
434944\\
271840\\
217472\\
\hline
249{\cdot}3533952
\end{array}\ \text{Ans.}$$

DIVISION OF DECIMALS.

Rule.—(1.) Divide, as in whole numbers, and cut off as many figures in the quotient as the decimal places in the dividend exceed those of the divisor. (2.) If there be not figures enough in the quotient, the deficiency must be supplied by prefixing ciphers. (3.) If there be a remainder, or there be more decimal places in the divisor than in the dividend, ciphers may be affixed to the dividend, and the quotient carried on to any extent.

Examples.—Divide 1·7154 by 1·5; and ·37046 by 16.

$$1{\cdot}5)\underline{1{\cdot}71540} \qquad\qquad 16)\underline{{\cdot}37046000}$$

$$1{\cdot}1436\ \text{Ans.} \qquad\qquad {\cdot}02315375\ \text{Ans.}$$

In the first example, by supplying a single cipher there is no remainder left; but in the second I must supply three ciphers to obtain an even answer; and I find the quotient has one figure less than there are decimals in the dividend so supplied: I must therefore prefix a cipher to the quotient found.

FRACTIONAL NUMBERS.

A Vulgar Fraction is a part of a whole number, and is written with two rows of figures with a line between them;

$$\text{as } \frac{1}{4},\quad \frac{3}{8},\quad \frac{5}{6},\quad \frac{10}{16},\quad \frac{108}{460}.$$

The figure above the line is called the Numerator; and the one below the line, the Denominator.

To reduce a Vulgar Fraction to a Decimal.

Rule.—Add as many ciphers to the numerator of the fraction as may be necessary for the accuracy of the answer required, and divide by the denominator of the fraction.

Examples.—(1.)—Reduce $\frac{1}{99}$ to a decimal.

$$1{\cdot}000000 \div 99 = {\cdot}0101\dot{0}\dot{1}\ \text{Ans.}$$

(2.)—Reduce $\frac{1}{75}$ to a decimal.

$1{\cdot}00000 \div 75 = {\cdot}0133\dot{3}$ Ans.

(3.)—Reduce $\frac{1}{4}$ to a decimal. 4)1·00(·25 Ans.
(4.)—Reduce $\frac{1}{2}$ to a decimal. ·5 Ans.
(5.)—Reduce $\frac{3}{4}$ to a decimal. ·75 Ans.
(6.)—Reduce $\frac{3}{8}$ to a decimal. ·375 Ans.
(7.)—Reduce $\frac{5}{26}$ to a decimal. ·1923076 + Ans.
(8.)—Reduce $\frac{11}{14}$ of $\frac{10}{13}$ to a decimal. ·6043956 + Ans.

Note.—If the given parts are of several denominations, they may be reduced, either by so many distinct operations as there are different parts; or, by first reducing them into their lowest denominations, and then divide as before; or,

2dly.—Bring the lowest into decimals of the next superior denomination, and on the left hand of the decimal found, place the parts given of the next superior denomination, so proceeding till you bring out the decimal parts of the highest integer required, by still dividing the product by the next superior denominator; or,

3dly.—To reduce shillings, pence, and farthings. If the number of shillings be even, take half for the first place of decimals, and let the second and third places be filled up with the farthings contained in the remaining pence and farthings, always remembering to add one, when it is or exceeds 25. But if the number of shillings be odd, the second place of decimals must be increased by 5. Next divide half the number of farthings in the pence and farthings (rejecting 24 or 6d. if there be 6d.) by 12; the quotient, written after the three places before found, will give the decimal required.

Examples.—(9.)—Reduce 16s. $7\frac{3}{4}$d. to the decimal of a £.

FIRST.	SECOND.	THIRD.	
16s. $7\frac{3}{4}$d.	4)3·00	2)16	$7\frac{3}{4}$
12	———	———	4
—	12)7·75	·831	—
199	———	———	31
4	20)16·64583		—
—	———		
960)799(·8322916	·8322915 Ans.		

(10.)—Reduce 5s. to the decimal of a £. ·25 Ans.
(11.)—Reduce 9s. to the decimal of a £. ·45 Ans.
(12.)—Reduce 16s. to the decimal of a £. ·8 Ans.
(13.)—Reduce 8s. 4d. to the decimal of a £. ·416 Ans.
(14.)—Reduce 12 drams to the decimal of a lb. avoirdupois. ·046875 Ans.
(15.)—Reduce 2 qrs. 14lbs. to the decimal of a cwt. ·62 Ans.

To find the value of any Decimal Fraction in the known parts of an integer.

Rule.—Multiply the decimal given, by the number of part of the next inferior denomination, cutting off the decimals from the product; then multiply the remainder by the next inferior denomination; thus proceeding till you have brought the least known parts of the integer.

Examples.—(16.) What is the value of ·8322916 of a £.?

16s. 7½d.+Ans.

```
       20
-----------
16·6458320
        12
-----------
 7·7499840
         4
-----------
 ½·9999360
-----------
```

(17.) What is the value of ·046875 of a lb. avoirdupois? 12 drams. Ans.

(18.) What is the value of ·625 of a cwt.? 2 qrs. 14 lbs. Ans.

(19.) What is the value of ·142465+of a year? 52 days. Ans.

Decimal Equivalents to Fractional Parts of Lineal Measures.

One inch, the integer or whole number.

·96875	are equal to	7/8 and 3/32	·625	are equal to	5/8	·28125	are equal to	1/4 and 1/32
·9375		7/8 and 1/16	·59375		1/2 and 3/32	·25		1/4
·90625		7/8 and 1/32	·5625		1/2 and 1/16	·21875		1/8 and 3/32
·875		7/8	·53125		1/2 and 1/32	·1875		1/8 and 1/16
·84375		3/4 and 3/32	·5		1/2	·15625		1/8 and 1/32
·8125		3/4 and 1/16	·46875		3/8 and 3/32	·125		1/8
·78125		3/4 and 1/32	·4375		3/8 and 1/16	·09375		3/32
·75		3/4	·40625		3/8 and 1/32	·0625		1/16
·71875		5/8 and 3/32	·375		3/8	·03125		1/32
·6875		5/8 and 1/16	·34375		1/4 and 3/32			
·65625		5/8 and 1/32	·3125		1/4 and 1/16			

One foot, or 12 inches, the integer.

·9166	are equal to	11 inches.	·4166	are equal to	5 inches.	·0625	are equal to	3/4 of in.
·8333		10 „	·3333		4 „	·05208		5/8 „
·75		9 „	·25		3 „	·04166		1/2 „
·6666		8 „	·1666		2 „	·03125		3/8 „
·5833		7 „	·0833		1 „	·02083		1/4 „
·5		6 „	·07291		7/8 „	·01041		1/8 „

One yard, or 36 inches, the integer.								
·9722		35 inches.	·6389		23 inches.	·3055		11 inches.
·9444		34 „	·6111		22 „	·2778		10 „
·9167		33 „	·5833		21 „	·25		9 „
·8889	are equal to	32 „	·5556	are equal to	20 „	·2222	are equal to	8 „
·8611		31 „	·5278		19 „	·1944		7 „
·8333		30 „	·5		18 „	·1667		6 „
·8056		29 „	·4722		17 „	·1389		5 „
·7778		28 „	·4444		16 „	·1111		4 „
·75		27 „	·4167		15 „	·0833		3 „
·7222		26 „	·3889		14 „	·0555		2 „
·6944		25 „	·3611		13 „	·0278		1 „
·6667		24 „	·3333		12 „			

DECIMAL APPROXIMATIONS FOR FACILITATING CALCULATIONS IN MENSURATION.

Lineal feet	multiplied by	·00019	=	miles.
„ yards	„	·000568	=	„
Square inches	„	·007	=	square feet.
„ yards	„	·0002067	=	square acres.
Circular inches	„	·00546	=	square feet.
Cylindrical inches	„	·0004546	=	cubic feet.
„ feet	„	·02909	=	cubic yards.
Cubic inches	„	·00058	=	cubic feet.
„ feet	„	·03704	=	cubic yards.
„ „	„	6·232	=	imperial gallons.
„ inches	„	·003607	=	„ „
Cylindrical feet	„	4·895	=	„ „
„ inches		·002832	=	„ „
Cubic inches	„	·263	=	lbs. avoirdupois of cast iron.
„ „	„	·281	=	„ wrought iron.
„ „	„	·283	=	„ steel.
„ „	„	·3225	=	„ copper.
„ „	„	·3037	=	„ brass.
„ „	„	·26	=	„ zinc.
„ „	„	·4103	=	„ lead.
„ „	„	·2636	=	„ tin.
„ „	„	·4908	=	„ mercury.
Cylindrical inches		·2065	=	„ cast iron.
„	„	·2168	=	„ wrought iron.
„	„	·2223	=	„ steel.
„	„	·2533	=	„ copper.
„	„	·2385	=	„ brass.
„	„	·2042	=	„ zinc.
„	„	·3223	=	„ lead.
„	„	·207	=	„ tin.
„	„	·3854	=	„ mercury.
Avoirdupois lbs.	„	·009	=	cwts.
„	„	·00045	=	tons.

Decimal Parts of a Superficial Foot of 144 *inches, reduced to their value in inches.*

Inches.	Hundredth Parts.	Inches.	Hundredth Parts.	Inches.	Hundredth Parts.	Inches.	Hundredth Parts.
144	1·00	72	·50	13	·9	6	·4
130	·90	57	·40	11	·8	4·3	·3
115	·80	43	·30	10	·7	2·9	·2
100	·70	28	·20	9	·6	1·4	·1
87	·60	14	·10	7	·5		

Decimal Parts of a Cwt. (112 *lbs.*)

Lbs.	Decimals.	Lbs.	Decimals.	Lbs.	Decimals.
84	·75	20	·178572	10	·089286
56	·5	19	·169643	9	·080357
28	·25	18	·160714	8	·071428
27	·241071	17	·151785	7	·0625
26	·232142	16	·142856	6	·053571
25	·223214	15	·133928	5	·044643
24	·214286	14	·125	4	·035714
23	·205357	13	·116071	3	·026786
22	·196428	12	·107143	2	·017857
21	·1875	11	·098214	1	·008928

Decimal Parts of a Pound (16 *oz.*) *reduced to their value in Ounces.*

Ounces.	Hundredth Parts.	Ounces.	Hundredth Parts.	Ounces.	Hundredth Parts.	Ounces.	Hundredth Parts.
16	1·00	¾℔12	·75	½℔8	·50	¼℔4	·25
15½	·97	11½	·72	7½	·46	3½	·22
15	·94	11	·69	7	·43	3	·19
14½	·90	10½	·65	6½	·40	2½	·15
14	·87	10	·62	6	·37	2	·12
13½	·84	9½	·59	5½	·34	1½	·09
13	·81	9	·56	5	·31	1	·06
12½	·78	8½	·53	4½	·28		

Application.—Required the weight of one foot of Bar Iron, 2¼ inches square.

Refer to the Table of the Weight of Bars, and you will find 2¼ in. square to be 16·87, that is, 16 pounds and 87 hundredth parts of a pound; and to ascertain this decimal in ounces, refer to the above Table for the decimal that is nearest, you will find it to be ·87, opposite to which is 14 ounces, the weight of the decimal required, consequently the weight of one foot length of 2¼ in. square bar in question, will be 16 pounds 14 ounces.

Required the weight of a Bar of Iron 1⅜ in. broad by ⅝ in. thick, 16 feet long?

Application.—See Table.—1 foot length is 2·86

```
 2·86
   16
 ----
 1716
 286
 ----
45·76 or 45¾ lbs. Ans.
```

Required the weight of 35 Bars, Round Iron, 1¼ inch diameter, 12 feet long each?

See Table for 1 foot of 1¼ in. Round Iron, which is 4·09 lbs.

```
      4·09
        12
     -----
     49·08
        35
     -----
     24540
    14724
     -----
112)1717·80
```

15 cwts. 1qr. 9lbs. and 80 parts, or 15 cwts. 1 qr. 9¾ lbs. Ans.

Decimal Parts of £1. Sterling.

Shillings.	Decimals.	Pence.	Decimals.
19	·95	11	·045833
18	·9	10	·041666
17	·85	9	·0375
16	·8	8	·033333
15	·75	7	·029166
14	·7	6	·025
13	·65	5	·020833
12	·6	4	·016666
11	·55	3	·0125
10	·5	2	·008333
9	·45	1	·004166
8	·4		
7	·35		
6	·3	**Farth.**	**Decimals.**
5	·25		
4	·2	3	·003125
3	·15	2	·0020833
2	·1	1	·0010416
1	·05		

Decimal Parts of 1s.

Pence.	Decimals.
11	·916666
10	·833333
9	·75
8	·666666
7	·583333
6	·5
5	·416666
4	·333333
3	·25
2	·166666
1	·083333
Farth.	**Decimals.**
3	·0625
2	·041666
1	·020833

MENSURATION.

AREAS OF SURFACES.

PROBLEM I.

To find the Area of any Parallelogram, whether it be a Square, a Rectangle, a Rhombus, or a Rhomboid.—See Plate, Figs. 1, 2, 3, 4.

Rule.—Multiply the length by the perpendicular breadth or height, and the product will be the area.

Example.—What is the area of a Rhomboid, the length A B being 7, the perpendicular B C being 4?

$$7 \times 4 = 28 \text{ area of Rhomboid.}$$

PROBLEM II.

To find the Area of a Triangle.

Rule.—Multiply the base by the perpendicular height, and take half the product for the area.

Example.—What is the area of a Triangle, the base being 9, and the perpendicular $8\frac{1}{2}$?

$$9 \times 8\tfrac{1}{2} = 76\tfrac{1}{2} \text{ and } \frac{76\frac{1}{2}}{2} = 38\tfrac{1}{4} \text{ area.}$$

PROBLEM III.

To find the Area of a Trapezoid.—See Plate, Fig. 5.

Rule.—Add together the two parallel sides; then multiply their sum by the perpendicular breadth, or the distance between them, and take half the product for the area.

Example.—What is the area of a Trapezoid?

$$\left.\begin{array}{l} \text{A B} = 9 \\ \text{C D} = 8 \end{array}\right\} \text{parallel sides.} \qquad \overline{9 + 8} \times 5 = 85$$

$$\text{B D} = 5 \text{ perpendicular.} \qquad \text{and } \frac{85}{2} = 42\tfrac{1}{2} \text{ area.}$$

PROBLEM IV.

To find the Area of a Trapezium.—See Fig. 6.

Rule.—Multiply the diagonal by the sum of the perpendiculars falling upon it from the opposite angles, and half the product will be the area.

Example.—What is the area of a Trapezium?

A C = 8 diagonal.

$$\left.\begin{array}{l} \text{D F} = 4 \\ \text{B E} = 5 \end{array}\right\} \text{perpendiculars.}$$

$$\overline{5 + 4} \times 8 = 72$$

$$\text{and } \frac{72}{2} = 36 \text{ area.}$$

PROBLEM V.

To find the Area of an Irregular Polygon.—See Fig. 7.

Rule.—Draw Diagonals dividing the proposed Polygon into Trapeziums and Triangles; then find the areas of all these separately, and add them together for the content of the whole Polygon.

Example.—What is the area of an irregular Polygon?

$$\left.\begin{array}{l} \text{A C} = 9 \\ \text{A D} = 8 \end{array}\right\} \text{bases.}$$

$$\left.\begin{array}{l} \text{B F} = 2 \\ \text{D H} = 4 \\ \text{E G} = 3 \end{array}\right\} \text{perpendiculars.}$$

$$\begin{array}{r} \overline{4 + 2} \times 9 = 54 \\ 3 \times 8 = \underline{24} \end{array}$$

$$\frac{78}{2} = 39 \text{ area.}$$

PROBLEM VI.

To find the Area of a Regular Polygon.

Rule 1.—Multiply the perimeter of the Polygon, or sum of its sides, by the perpendicular drawn from its centre on one of its sides, and take half the product for the area.

Rule 2.—Square the side of the Polygon; then multiply that square by the tabular area set against its name in the following Table, and the product will be the area.

Example.—What is the area of a regular Nonagon, its side being 5, and perpendicular 6·8686935?

By Rule 1.

$$45 \text{ perimeter} = 5 \times 9$$

$$45 \times 6{\cdot}8686935 = 309{\cdot}0912097$$

$$\text{now } \frac{309{\cdot}09}{2} = 154{\cdot}54 \text{ area.}$$

By Rule 2.

$$5^2 \times 6{\cdot}1818242 = 154{\cdot}5456 \text{ the area.}$$

No. of Sides.	Names.	Areas.
3	Trigon, or Triangle......	0·4330127
4	Tetragon, or Square.....	1·0000000
5	Pentagon	1·7204774
6	Hexagon	2·5980762
7	Heptagon	3·6339124
8	Octagon	4·8284271
9	Nonagon	6·1818242
10	Decagon......................	7·6942088
11	Undecagon..................	9·3656399
12	Dodecagon..................	11·1961524

PROBLEM VII.

To find the Diameter and Circumference of any Circle, the one from the other.—See Fig. 8.

This may be done by any one of the three following proportions, viz., As 7 is to 22, so is the diameter to the circumference; or, As 1 is to 3·1416, so is the diameter to the circumference; or, As 113 is to 355, so is the diameter to the circumference.

Example.—What is the circumference of a Circle, its diameter being 6?

First, 7 : 22 : : 6 : 18·857 circumference.
Second, 1 : 3·1416 : : 6 : 18·8496 do.
Third, 113 : 355 : : 6 : 18·8495 do.

This last (113 : 355 : : 6) is the most correct proportion to find the circumference from the diameter, or the diameter from the circumference.

PROBLEM VIII.

To find the Length of any Arc of a Circle.—See Fig. 9.

Rule.—Multiply the decimal ·01745 by the degrees in the given arc, and the product by the radius of the circle, for the length of the arc.

Example.—What is the length of the arc of a circle, the number of degrees being 25, and radius 7?

$$\cdot 01745 \times 25 \times 7 = 3\cdot 05375, \text{ length of arc.}$$

Note.—·01745 is found by dividing the circumference by 360° when the radius is 1,—*i. e.* $\frac{6\cdot 2831854}{360} = \cdot 01745$.

PROBLEM IX.

*To find the Area of a Circle.**

Rule 1.—Multiply half the circumference by half the diameter, and the product is the area.

Rule 2.—Square the diameter, and multiply that square by the decimal ·7854 for the area.

Rule 3.—Square the circumference, and multiply that square by the decimal ·07958.

Example.—What is the area of a Circle, the diameter being 9, the circumference = 28·27, half of which is 14·135?

By Rule 1.—$14{\cdot}135 \times 4{\cdot}5 = 63{\cdot}6075$.
By Rule 2.—$9^2 \times {\cdot}7854 = 63{\cdot}6174$.
By Rule 3.—$28{\cdot}27^2 \times {\cdot}07958 = 63{\cdot}599$, &c.

Note.—The first Rule of this Problem is found by the theorem of the triangle: for, suppose the circle to be a regular Polygon of an indefinite number of sides, then, the sum of the sides will be the perimeter of the circle; consequently, the radius of the circle will be the altitude, and the perimeter the base of the triangle, the area of which is found by $\text{A} \times \frac{1}{2}\text{B}$, or $\frac{1}{2}\text{A} \times \text{B}$, (A being the altitude and B the base,) therefore the area of the circle will be $\frac{1}{2}$ circumference $\times$ $\frac{1}{2}$ diameter, or $\frac{1}{2}$ circumference $\times$ radius.

The second Rule is deduced from the first and Problem VII.: the first Rule is $\frac{\text{DC}}{4} =$ area (D C being the diameter and circumference); Problem VII. is $3{\cdot}1416\,\text{D} = \text{C}$, therefore the area is $\frac{3{\cdot}1416\,\text{D}^2}{4}$ or $= {\cdot}7854\,\text{D}^2$

The third Rule is found thus: $\text{D} = \frac{\text{C}^2}{3{\cdot}1416}$ and $\text{A} = \frac{\text{DC}}{4}$, therefore the area will be $\frac{\text{C}^2}{3{\cdot}1416 \times 4}$ or $\frac{\text{C}^2}{12{\cdot}5664}$; now the reciprocal of 12·5664 is ·07958, or $\frac{\text{A}}{\text{C}^2} = {\cdot}07958$; hence the rule $\text{C}^2 \times {\cdot}07958 =$ area.

---

* *Properties of the Circle.*

The diameter of a Circle being	1·
The Circumference	= 3·1416
„ Area	= ·7854
„ Side of equal square	= ·8862
„ Radius being 1, the area	= 3·1416
„ Circumference being 1, the side of equal square	= ·2821

Any circle twice the diameter of another contains twice the circumference of the other, and four times the area. Hence, the circumferences of circles are as their diameters, and their areas as the squares of their diameters.

PROBLEM X.

To find the Area of a Circular Ring, or of the space included between the circumferences of two circles; the one being contained within the other.

Rule.—Take the difference between the areas of the two circles for the area of the Ring.

Example.—What is the area of a Ring, the inside diameter being 5, and outside 7?

·7454 × 7^2 = 38·4846
·7854 × 5^2 = 19·6350

18·8496 = area of ring, or $\frac{7 + 5}{2} = 6$ medium diameter, then 3·1416 × 6 × $\frac{7-5}{2}$ = 18·84 area, or $7^2 - 5^2 = 24$, then ·7854 × 24 = 18·84 area.

PROBLEM XI.

To find the Area of a Sector of a Circle.—See Fig. 10.

Rule.—Multiply the radius, or half the diameter, by half the arc of the sector, for the area; or, multiply the whole diameter by the whole arc of the sector, and take $\frac{1}{4}$ of the product.

Example.—What is the area of the sector of a Circle, the radius A C being 5, and arc A B, 8?

$$4 \times 5 = 20 \text{ area, or } \frac{8 \times 10}{4} = 20 \text{ area.}$$

PROBLEM XII.

To find the Area of a Segment of a Circle.—See Fig. 11.

Rule 1.—Find the area of the sector, having the same arc with the segment, by the rule of last Problem. Find also the area of the triangle formed by the chord of the segment and the two radii of the sector; then add these together for the answer, when the segment is greater than a semicircle; or subtract them, when it is less than a semicircle: as is evident.

Rule 2.—Divide the height of the segment by the diameter, and find the quotient in the column of heights in the following Table. Take out the corresponding area in the next column on the right hand; and multiply it by the square of the circle's diameter for the area of the segment.

When the quotient is not found exactly in the Table, proportion may be made between the next less and greater area, in the same manner as is done with any other Table.

Example.—What is the area of the segment of a Circle, the radius A E being 10, chord A B C, 12, and arc A D C 73° 74′?

Rule 1.—·7854 × 400 = 314·16 area of whole circle, and 360° : 73° 74′ : : 314·16 : 64·78095 area of sector. Half the chord is 6, and $\sqrt{10^2 - 6^2} = 8 =$ B E the height of the triangle.

Rule 2.—10—8 = 2 the height of the segment, $\frac{2}{20} = \cdot 1$ the quotient; and opposite to it, in the right column of the following Table, is ·04088, which, multiplied by the square of the diameter, is ·04088 × 20^2 = 16·352 area, nearly same area as found by Rule 1.

Table of the Areas of Circular Segments.

Height.	Area of Segment.	Height.	Area of Segment.	Height.	Area of Segment.	Height.	Area of Segment.	Height.	Area of Segment.
·01	·00133	·11	·04701	·21	·11990	·31	·20738	·41	·30319
·02	·00375	·12	·05339	·22	·12811	·32	·21667	·42	·31304
·03	·00687	·13	·06000	·23	·13646	·33	·22603	·43	·32293
·04	·01054	·14	·06683	·24	·14494	·34	·23547	·44	·33284
·05	·01468	·15	·07387	·25	·15354	·35	·24498	·45	·34278
·06	·01924	·16	·08111	·26	·16226	·36	·25455	·46	·35274
·07	·02417	·17	·08853	·27	·17109	·37	·26418	·47	·36272
·08	·02944	·18	·09613	·28	·18002	·38	·27386	·48	·37270
·09	·03502	·19	·10390	·29	·18905	·39	·28359	·49	·38270
·10	·04088	·20	·11182	·30	·19817	·40	·29337	·50	·39270

PROBLEM XIII.

To find the Area of an Ellipsis or Oval.—See Fig. 12.

RULE.—Multiply the longest diameter by the shortest; then multiply the product by the decimal ·7854 for the area.

Example.—What is the area of an Oval, its diameters being 7 and 5?

7 × 5 × ·7854 = 27·4890 area.

Note.—The circumference of an Ellipsis is $\sqrt{4 D^2 + d^2} \times 1{\cdot}11$ nearly.

PROBLEM XIV.

To find the Area of an Elliptic Segment.

RULE.—Divide the height of the segment by the vertical axis of the ellipse, and find in the Table of circular segments, Prob. XII., the circular segment having the above quotient for its versed sine; then multiply all together, this segment and the two axes of the ellipse.

Example.—What is the area of an elliptic segment, its height being 2, vertical axis 20, and parallel axis 5 ?

$$20\,\underline{)2}$$
$$\cdot 1 \text{ gives } \cdot 04088 \times 5 \times 20 = 4\cdot 0880 \text{ area.}$$

PROBLEM XV.

To find the Area of a Parabola, or its Segment.—See Fig. 13.

Rule.—Multiply the base by the perpendicular height ; then take two-thirds of the product for the area.

Example.—What is the area of a Parabola, its base being 6, and height 9 ?

$$6 \times 9 = \frac{54 \times 2}{3} = 36 \text{ area of segment.}$$

SOLIDS.

PROBLEM I.

To find the Superficies of a Prism or Cylinder.—See Figs. 14 and 15.

Rule.—Multiply the perimeter of one end of the Prism, by the length of the solid, and the product will be the surface of all its sides. To which add also the area of the two ends of the Prism, when required.

Or, compute the areas of all the sides and ends separately, and add them all together.

Example.—What is the superficies of an equilateral triangular Prism, its length being 9, and side 3 ?

$3 \times 3 = 9$ perimeter, then $9 \times 9 = 81$ superficies ; or, $3 \times 9 = 27$ area of one side, and $27 \times 3 = 81$ superficies, or area of the three sides.

PROBLEM II.

To find the Surface of a Pyramid or Cone.—See Figs. 16 and 17.

Rule.—Multiply the perimeter of the base by the slant height, or length of the side, and half the product will be the surface of the sides, or the sum of the areas of all the triangles which form it. To which add the area of the end or base, if required.

Example.—What is the surface of a pyramid, its slant height being 20, and the perimeter of its base 15?

$$\frac{15 \times 20}{2} = 150 \text{ surface of pyramid.}$$

PROBLEM III.

To find the Solid Content of any Prism or Cylinder.

RULE.—Find the area of the base, or end, whatever the figure of it may be, and multiply it by the length of the Prism or Cylinder, for the solid content.

Example.—What is the solid content of a Cylinder, its diameter being 3, and length 7?

$$\cdot 7854 \times 9 = 7 \cdot 0686 \text{ area, and } 7 \cdot 0686 \times 7 = 49 \cdot 4802 \text{ solidity.}$$

PROBLEM IV.

To find the Solid Content of any Pyramid or Cone.—See Figs. 16 and 17.

RULE.—Find the area of the base, and multiply that area by the perpendicular height; then take one-third of the product for the content.

Example.—What is the content of a Cone, the area of its base being 9, and vertical height 17?

$$17 \times 9 = 153, \text{ and } \frac{153}{3} = 51 \text{ solid content.}$$

PROBLEM V.

To find the Solidity of the Frustum of a Cone or Pyramid.

RULE.—Add into one sum the areas of the two ends, and the mean proportional between them; and take one-third of that sum for a mean area; which, being multiplied by the perpendicular height or length of the frustum, will give its content.

Example.—What is the solidity of the frustum of a Cone, the vertical height 19, the areas of its ends being 12 and 9?

$$\begin{array}{rl} & 12 \\ & 9 \\ & \underline{10 \cdot 5} \text{ mean proportional.} \\ 3) & \underline{31 \cdot 5} \\ & 10 \cdot 5 \times 19 = 199 \cdot 5 \text{ solid content.} \end{array}$$

PROBLEM VI.

To find the Surface of a Sphere or any Segment.—See Fig. 18.

RULE.—Multiply the circumference of the Sphere by its diameter, and the product will be the whole surface of it.

Note.—For the surface of a Segment or Frustum, multiply the whole circumference of the Sphere by the height of the part required.

Example.—What is the superficial content of a Sphere, its diameter being 7?

Diameter 7; the circumference = 22.
$22 \times 7 = 154$ superficial content.

PROBLEM VII.

*To find the Solidity of a Sphere or Globe.**

RULE 1.—Multiply the surface by the diameter, and take one-sixth of the product for the content; or, which is the same thing, multiply the square of the diameter by the circumference, and take one-sixth of the product.

RULE 2.—Take the cube of the diameter, and multiply it by the decimal ·5236 for the content.

RULE 3.—Cube the circumference, and multiply it by ·01688 for the content.

Example.—What is the solid content of a Globe 7 inches diameter?

This is the same diameter of the Sphere as in last Example; therefore the surface will be 154 inches.

Rule 1.—$\frac{154 \times 7}{6} = 179\frac{4}{6}$, or $\frac{7^2 \times 22}{6} = 179\frac{4}{6}$ cubic content.

Rule 2.—$7^3 = 343 \times {\cdot}5236 = 179{\cdot}5948$ cubic content.

Rule 3.—$22^3 = 10{,}648 \times {\cdot}01688 = 179{\cdot}73824$ do.

PROBLEM VIII.

To find the Solid Content of a Spherical Segment.—See Fig. 18.

RULE 1.—From three times the diameter of the Sphere take double the height of the Segment; then multiply the remainder by the square of the height, and the product by the decimal ·5236 for the content.

RULE 2.—To three times the square of the radius of the Segment's base, add the square of its height; then multiply the sum by the height, and the product by ·5236 for the content.

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* *Properties of the Sphere.*

The diameter of a Sphere being .... 1·
The superficies .... = 3·1416
„ Solidity .... = ·5236
„ Side of an equal cube .... = ·806
„ Length of an equal cylinder of the same diameter .... = ·6667

Any sphere or globe, twice the diameter of another, contains four times the superficies of the other, and eight times the solid content. Hence, the superficies of spheres are as the squares, and the solidity as the cubes, of their diameters.

Example.—What is the solid content of a Spherical Segment 2 feet high, taken from a sphere 8 feet diameter.

Rule 1.—$8 \times 3 = 24 - \overline{2 \times 2} = 20 \times 2^2 = 80 \times {\cdot}5236 = 41{\cdot}888$; radius of sphere is 4, now $4^2 = 16$, and from the radius take the height of the segment, $4 - 2 = 2$, which $2^2 = 4$, therefore $16 - 4 = 12 =$ square of the radius of Segment's base.

Rule 2.—$\overline{12 \times 3 + 2^2} \times 2 \times {\cdot}5236 = 41{\cdot}888$ content.

PROBLEM IX.

To find the Length of a Cylindrical Helix, or Spiral, wound round a Cylinder.

RULE.—Multiply the circumference of the base by the number of revolutions of the Spiral, and to the square of the product add the square of the height; the square root of the sum is the length of the spiral.

Example I.—Required the length of the thread or screw twisting round a Cylinder 22 inches in circumference $3\frac{1}{2}$ times, and extending along the axis 16 inches.

$22 \times 3{\cdot}5 = 77^2 = 5929$, and $16^2 = 256$; then $\sqrt{5929 + 256} = 78{\cdot}64$ inches.

Example II.—The well of a winding staircase is 5 feet diameter, and height to the top landing 25 feet, the hand-rail is to make $2\frac{1}{2}$ revolutions; required its length.

5 feet diameter $= 15{\cdot}7$ feet circumference.

$\overline{15{\cdot}7 \times 2{\cdot}5} = 39{\cdot}25^2 = 1540{\cdot}5625$, and $25^2 = 625$; then $\sqrt{1540 + 625} = 46{\cdot}5$ feet, the length required.

PROBLEM X.

To find the Solid Content of a Wedge.—See Fig. 19.

RULE.—To twice the length of the base add the length of the edge; multiply the sum by the breadth of the base, and by the perpendicular height from the base, and one-sixth of the product is the solid content.

Example.—Required the solidity of a Wedge in cubic inches, the base A B C D being 9 inches by $3\frac{1}{2}$, the edge E F, 7 inches, and the perpendicular height G E, 15.

$$\frac{\overline{18 + 7} \times 3{\cdot}5 \times 15}{6} = 218{\cdot}75 \text{ cubic inches.}$$

GENERAL TABLE OF METALS.

CONTRACTIONS—Ox. Hy. = melts before Oxy Hydrogen blow-pipe. S. F. = melts at highest heat of Smith's forge.

Abbreviations or Symbols.	Chemical Equivalents.		When and by whom discovered as pure metals.	Specific Gravity, or Weight water at 60°=1·00.	Melting Point, Fahrenheit's Thermometer.	GENERAL REMARKS.
	Hydrogen = 1.	Oxygen = 100. Hy. = 12·5.				
1. **GOLD** *(Aurum)* Au.	98·33	1229·16	*Known to the Ancients*	19·26	2016°	1. The most ancient metal. Found in small quantities in all parts of the world; at the beginning of this century South America was the largest source of supply; now, the supply comes in the following order—Australia, California and other parts of America, and Russia.
2. **SILVER** *(Argentum)* .... Ag.	108·00	1350·00		10·47	1837°	2. Found native in sulphurets, and in most of the lead ores.
3. **IRON** *(Ferrum)* Fe.	28·00	350·00		7·78	2786°	3. The most universally diffused mineral. Chief supply from Wales, Staffordshire, Yorkshire, and Scotland; found in various parts of Europe and America—rarely found native. The only metal, except platinum and potassium, capable of being welded, or hammered or pressed together, two several pieces into one solid mass.
4. **COPPER** *(Cuprum)* Cu.	31·66	395·70		8·89	1996°	4. Found native, frequently in small quantities, and mines wrought in every quarter of the globe. England alone (chiefly Cornwall and Devon) yields about two-thirds of the entire produce of the world.
5. **MERCURY** *(Hydrargyrum)* .... Hg.	100·07	1250·90		13·60	39° below Zero.	5. Found chiefly in Austria and Spain, also in Japan, South America, Mexico, China, &c.; frequently found pure, or sulphuret and other ores 50 to 80 per cent.; rich in pure mercury.

[SEE OVER.]

GENERAL TABLE OF METALS, CONTINUED.

Abbreviations or Symbols.	Chemical Equivalents.		When and by whom discovered as pure metals.	Specific Gravity, or Weight water at 60°=1·00.	Melting Point, Fahrenheit's Thermometer.	GENERAL REMARKS.
	Hydrogen = 1.	Oxygen = 100. Hy. = 12·5.				
6. **LEAD** (*Plumbum*) Pl.	103·56	1294·50		11·35	612°	6. Chief *ore*, galena or sulphuret of lead. Chief supply, England, Spain, Ireland, Scotland; sometimes found native in Alston Moor, Cumberland.
7. **TIN** (*Stanum*). Sn.	58·82	735·24		7·30	442°	7. Cornwall, Malacca, and Banca, are the only sources of supply worth notice; found in very limited quantities in other parts of Europe and Asia. Cornish tin, till 1837, paid a duty of £4. per ton to the Duke of Cornwall.
8. **ANTIMONY** (*Stibium*) .... Sb.	129·03	1612·90	*Basil Valentine*......... A. D. 1490	6·70	810°	8. Chief ore, *sulphuret*; found in Hungary, the Hartz Mountains, and in France. Brittle metal; principally used in making type metal, and white metals for spoons, &c.
9. **BISMUTH**......... Bi.	70·95	886·92	*Agricola* ... 1530	9·80	497°	9. Brittle; of a reddish white colour. Bismuth 8 parts, lead 5, tin 3, form a mixture that melts in boiling water; found in small quantities, and combined with other ores in various parts of Europe. Chief supply from Schneeberg in Saxony.
10. **ZINC**............... Zn.	32·52	406·59	*Paracelsus*... 1535	7·00	773°	10. (Spelter). Chief supply, Silesia and Belgium. Since the removal of the duty on foreign, very little is smelted in this country, although the ores are found in various localities; very malleable at 212° Fah. Calamine, one of the chief ores of zinc, was long used before it was known as a distinct metal.
11. **ARSENIC**......... As.	75·00	937·50	*Brandt* 1733	5·88	700°	11. Very soft and brittle, of a steel gray colour, readily oxidizes. The deadly poison, white arsenic of commerce, is the oxide of arsenic; it hard-

			A.D.			ens any metal with which it may be mixed, and is thus used with lead, 1 to 100 in making shot. Chief supply from Saxony and Bohemia.
12. **Cobalt** .... Co.	29·52	368·99	*Do.* 1733	8·53	2800°	12. Reddish gray, and brittle. Little used in the metallic state. Oxide of Cobalt, a brilliant blue, much used in the arts.
13. **Platinum** ...... Pt.	98·68	1233·50	*Charles Wood* 1741	20·98	Ox. Hy.	13. Very scarce, beautiful white metal, almost indestructible; nearly as valuable as gold. Very ductile and malleable, less hard than iron. Found in the Ural Mountains, S. America, and Spain.
14. **Nickel** .... Ni.	29·57	369·68	*Cronstedt* ... 1751	8·27	2800°	14. From Germany and Sweden. Used in the manufacture of German silver; best, 8 copper, 3 nickel, 3½ zinc; common, 8 copper, 2 nickel, 4 zinc. Used also in the manufacture of porcelain.
15. **Manganese** ... Mn.	27·67	345·90	*Gahn* 1774	6·85	S. F.	15. Not used in the metallic state. The manganese of commerce (black oxide) is largely used in the manufacture of bleaching powder.
16. **Tungsten** (*Wolfram*) .... W.	94·64	1183·00	*Delhuyart* ... 1781	17·50	Do.	16. White, hard, brittle; found as tungstate of lime, iron, and manganese; not used in the arts.
17. **Tellurium** ... Te.	66·14	801·76	*Müller* 1782	6·10	650°	17. Colour, tin white; not used in the arts.
18. **Molybdenum** . Mo.	47·88	598·52	*Hielm* 1782	7·40	Ox. Hy.	18. White, brittle, and very infusible; its native sulphuret was long taken for an ore of lead, and is frequently found united with lead ore.
19. **Uranium** ...... U.	60·00	750·00	*Klaporth* ... 1789	9·00	Do.	19. A black powder, slight metallic lustre; very combustible; burns with a white light.
20. **Titanium** ...... Ti.	24·29	303·66	*Gregor* 1790	5·30	Do.	20. Rare, and very hard; found in slags of iron-smelting furnaces, in bright red crystals.
21. **Chromium** ...... Cr.	28·15	351·82	*Vauguelin* ... 1797	5·90	Do.	21. Whitish and brittle; not used in the metallic state. Its combinations form many useful colours to dyers, calico-printers, and potters.
22. **Collumbium, or Tantalum** ... Col.	92·30	1153·72	*Hatchett* ... 1802	5·60	burns freely in air.	22. Black powder; becomes lustrous under a burnisher.
23. **Palladium** ... Pd.	53·27	665·90	*Wollaston* ... 1803	11·80	Do.	23. Found associated with platinum ores, which metal it resembles; it is hard, ductile, and malleable.

[See Over.]

GENERAL TABLE OF METALS, CONTINUED.

	Abbreviations or Symbols.	Chemical Equivalents.		When and by whom discovered as pure metals.		Specific Gravity, or Weight water at 60°=1·00.	Melting Point, Fahrenheit's Thermometer.	General Remarks.
		Hydrogen = 1.	Oxygen = 100· Hy. = 12·5.		A.D.			
24. Rhodium	R.	52·11	651·39	*Wollaston* ...	1803	10·65	burns freely in air.	24. Whitish, and very hard; has been used for the points of pens.
25. Iridium	Ir.	98·68	1233·50	*Tennant* ...	1803	18·68	Do.	25. Gray and brittle; produces, in its solutions, many brilliant colours, hence the name (Iris, *the rainbow*).
26. Osmium	Os.	99·56	1244·49	*Do.*	1803	10·00	Do.	26. Grayish white, porous, and assuming a metallic lustre when compressed.
27. Cerium	Ce.	46·00	575·00	*Hissinger and Berzelius* ..	1804		Do.	27. White, brittle; of no use in the arts.
28. Potassium (*Kalium*)......	K.	39·00	487·50	*Davy*.........	1807	0·865	136°	28. The lightest solid substance, and a most remarkable metal; has so strong an affinity for oxygen, that it takes fire on being thrown upon water. Forms the metallic base of potash of commerce.
29. Sodium (*Natronium*)	Na.	22·97	287·17	*Do.*	1807	0·97	190°	29. The metallic base of soda. Soft and malleable, resembling potassium in many features; thrown on water it does not burn, but is rapidly converted into soda, and melts.
30. Barium	Ba.	68·64	858·01	*Do.*	1807	4·00	melts below redness.	30. Of a gray colour, but of no use in its metallic state; it forms the base of baryta.
31. Strontium......	Sr.	43·84	548·02	*Do.*	1807			31. White, solid, and heavy; rapidly absorbs oxygen; the metallic basis of an earth found in a pale green mineral at Strontian, in Argyleshire. Nitrate of strontia gives a fine red colour in fireworks.
32. Calcium.........	Ca.	20·00	250·00	*Do.*	1807	4·0 to 8·0		32. A brilliant white, and highly inflammable; the metallic base of lime. 20 parts calcium, 8 parts oxygen = common lime.

33. **Cadmium**	Cd.	55·74	696·77	*Stromeyer*	1818	8·60	442°	33. White, like tin; too scarce to be used in the arts; sometimes the oxide (yellow) is used as a pigment.
34. **Lithium**	Li.	6·43	80·37	*Arfwedson*	1818			34. Resembles potassium; obtained by the galvanic battery from lithia; an alkaline base.
35. **Silicium**	Si.	21·35	266·82	*Berzelius*	1824	1·837	almost infusible.	35. The metallic base of silica, or flint; deep brown powder, destitute of lustre.
36. **Zirconium**	Zr.	33·62	420·20	*Do.*	1824			36. Black powder, resembling charcoal.
37. **Aluminum**	Al.	13·69	171·17	*Wöhler*	1828	2·58		37. Very difficult to procure in the metallic state in any quantity, till recently a French chemist has called attention to it, and obtained sufficient to declare it very malleable; bright and beautiful, like silver, and not affected by the ordinary acids; hopes are entertained of its application in the arts.
38. **Glucinum**	Gl.	26·50	331·26	*Do.*	1828		difficult of fusion.	38. Dark gray; the base of glucina, which is only found in three rare minerals—the emerald, beryl, and euclase.
39. **Yttrium**	Y.	32·20	402·51	*Do.*	1828			39.
40. **Thorium**	Th.	59·59	744·90	*Berzelius*	1829	9·402	infusible by	40. Dark iron gray; when ignited in open air it becomes thorina, a fine snow-white powder.
41. **Magnesium**	Mg.	12·67	158·35	*Bussy*	1829	2·24	volatile at white heat.	41. Brilliant and white, the metallic base of magnesia; hard, but ductile, like silver.
42. **Vanadium**		68·55	856·89	*Seftström*	1830			42. White, like silver; good electric-conductor.
43. **Lanthanum**	Ln.	48·00	600·00	*Mosander*	1838			43. Dark gray metallic powder; not used in the arts.
44. **Didymium**	Di.	48·00	600·00	*Do.*	1841			44.
45. **Erbium**	Er.			*Do.*	1843			45. The metallic base of erbia, a dark yellow earth; associated with yttria and terbia.
46. **Terbium**	Tr.			*Do.*	1843			46. Hypothetic base of terbia; properties little known yet.
47. **Ruthenium**	Ru.	52·11	652·49	*Kalus*	1844	8·6		47. One of the (so called) noble metals; closely resembles iridium.
48. **Pellopium**	Pp.			*H. Rose*	1845			48. } Recently discovered to be identical. *Niobium* is retained as the name.
49. **Niobium**	Nb.			*Do.*	1845			49. }
50. **Illemium**	Il.	Little	known yet.					50.
51. **Norium**	Nr.	Do.		*Svanberg*	1849			51.

STRENGTH OF MATERIALS.

COHESIVE STRENGTH.

The cohesive strength of a body, is that force by which its fibres or particles resist separation; therefore, the more particles there are in a body, the greater will be the power requisite to tear them asunder: *hence, the strength of bodies is as the area of their cross sections.*

Note.—The average breaking weight of a Bar of Wrought Iron, 1 inch square, is 25 tons: its elasticity is destroyed, however, by about two-fifths of that weight, or 10 tons. It is extended, within the limits of its elasticity, ·000096, or one-tenthousandth part of an inch for every ton of strain per square inch of sectional area.

Hence, the greatest constant load should never exceed one-fifth of its breaking weight, or 5 tons for every square inch of sectional area.

Column B, in the following Tables, gives the cohesive strength, in lbs., of the various bodies to which they refer.

General Properties of Metals. Table 1.

Name of Metal.	Weight in Lbs.				Strength.				Expansion in length for 1 degree of heat.
	Of a cube foot.	Of a plate 1 ft. sq. and 1 in. thick.	Of a bar 1 in. sq. and 1 ft. long.	Of a rod 1 in. in diam. and 1 ft. long.	Weight in lbs. required to crush 1 square inch.	Weight in lbs. required to tear asunder 1 square inch.	Value of E.	Value of S.	
					(A.)	(B.)	(E.)	(S.)	
Cast Iron......	450	37·5	3·12	2·45	107,750	17,920	1331	2548	·00000617
Wrought Iron	475	40·5	3·33	2·61	70,000	58,952	1803	2850	·00000698
Steel	490	40·8	3·40	2·67		130,000	2098		·00000636
Copper (cast).	549	45·7	3·81	2·99	116,480	19,072			·00001430
Gun-metal ...	510	42·5	3·54	2·78		35,840	714		·00001009
Brass (yellow)	523	43·6	3·63	2·85	163,520	17,958	646	890	·00001044
Lead (cast) ...	710	59·3	4·94	3·88	7,840	1,824	52	196	·00001593
Zinc (cast) ...	439	36·6	3·05	2·40			990	746	·00001634

General Properties of Timber. Table 2.

Name of Wood.	Weight in Pounds.		Strength.				Mean diameter of the trunk.	Average length of the trunk.
	Of a cube foot.	Of a bar 1 inch square and 1 foot long.	Weight in lbs. required to crush 1 square inch.	Weight in lbs. required to tear asunder 1 sq. in.	Value of E.	Value of S.		
			(A.)	(B.)	(E.)	(S.)	Ins.	Ft.
Ash	48	·33	8683	14,130	119·	2026	23	38
Beech	44	·30		11,500	98·	1556	27	44
Chesnut	55	·38		8,100	67·		37	44
Elm	35	·24	1284	9,740	50·64	1013	32	44
Fir, Mar Forest	44	·30		6,900	63·	1200		
„ New England	35	·24		10,210	158·5	1102		
„ Riga	47	·33		9,500	90·	1100	20	75
Larch	34	·24	4920	12,240	76·	900	33	45
Mahogany, Honduras ...	35	·24		11,475	115·3		72	40
„ Spanish	53	·37	8198	7,560	65·5			
Norway Spar	36	·25		8,320	105·47	1474	15	60
Oak, Adriatic	62	·43		12,830	70·5	1383		
„ Canadian............	55	·38		10,220	155·5	1766	34	53
„ Dantzic	47	·33		12,720	86·2	1457		
„ English	58	·41	9509	11,880	105·	1672	32	42
Pine, pitch	41	·29		9,800	88·68	1632		
„ red	41	·29	5748	11,840	133·	1341		
Sycamore	38	·26	7082	9,620	75·		29	32
Teak.......................	47	·32		12,920	174·7	2462		

General Properties of Natural Stones. Table 3.

Name of the Stone.	Weight in Pounds.		Strength.				Bulk of water absorbed, that of the stone being 1.	Composition.		
	Of a cube foot.	Of a cube yard.	Weight in lbs. on 1 sq. in. producing first fracture.	Weight in lbs. required to crush 1 square inch.	Weight in lbs. required to tear asunder 1 sq. in.	Weight of particles disintegrated in grains.		Silica, per cent.	Carbonate of lime, per cent.	Carbonate of magnesia, per cent.
			(A.)		(B.)					
Sandstone	144	3888	3941	5964	772	6·2	·097	96·2	1·1	0·0
Oolite	131	3546	1491	2574	857	8·3	·155	0·4	93·8	2·7
Limestone	144	3888	1751	4068		10·5	·114	5·0	83·9	4·2
Magnesian Limestone	141	3807	2733	5219		1·5	·148	1·7	54·6	40·6
White Marble	169	4563	4950	6060	551			1·1	94·5	0·0
Aberdeen Granite ...	164	4428	9251	10,910	....	......	......	Quartz, Feldspar, and Mica.		
Welsh Slate	172	4644			11,500					

TRANSVERSE STRENGTH OF BEAMS, BARS, &c.

If a beam be supported at both ends, and loaded in the middle, it will bend, (which is called deflection); and if the load be increased, it will break, (which is called fracture).—If a beam two inches deep and one inch broad support a given weight, another beam of the same depth, and double the breadth, will support double the weight;—*hence, beams of the same depth are to each other as their breadths:*—again, if a beam two inches deep and one inch broad, support a given weight, another beam of four inches deep and one inch broad, will support four times the weight;—*hence, beams of equal breadths are to each other as the squares of their depths:*—again, if a beam of a given cross section one foot long, support a known weight, another beam of the same cross section, but two feet long, will support only half the known weight;—*hence, beams of equal dimensions are to each other inversely as their lengths; therefore, the strength of beams is directly as their breadths and square of their depths, and inversely as their lengths; and if cylindrical, as the cubes of their diameters.*

TRANSVERSE STRENGTH OF TIMBER.*

RECTANGULAR BEAMS.

PROBLEM I.

To find the ultimate Transverse Strength of any Rectangular Beam of Timber, fixed at one end and loaded at the other.

Rule.—Multiply the tabular value of S, (see Table 2, Page 197), by the breadth and square of the depth, both in inches, and divide that product by the length also in inches; the quotient will be the weight in lbs.†

Example I.—What weight will it require to break a beam of Fir, the breadth being 2 inches, depth 6 inches, and length 20 feet?

$$\frac{1100 \times 36 \times 2}{240} = 330 \text{ lbs.}$$

Example II.—What is the weight requisite to break a beam of Ash, 7 inches square, 3 feet from the wall?

$$\frac{2026 \times 7^3}{36} = 19{,}303\tfrac{10}{36} \text{ lbs.}$$

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* See Barlow's Essay on the Strength and Stress of Timber.—*Art.* 149.

† When the beam is loaded uniformly throughout its length, the same Rule will still apply, only the result must be doubled.

Example III.—What will be the dimensions of a Fir beam 26 feet long, to support a weight of 400 lbs?

$\frac{312 \times 400}{1100} = 113\cdot5$ the breadth and square of the depth.

Suppose the breadth to be $2\frac{1}{2}$ inches, then $\frac{113\cdot5}{2\cdot5} = 51\cdot4$ the square of the depth, and $\sqrt{51\cdot4} = 7\cdot17$ the depth.

Suppose the depth to be 8 inches, then $\frac{113\cdot5}{8^2 = 64} = 1\cdot77$ the breadth.

PROBLEM II.

To compute the ultimate Transverse Strength of any Rectangular Beam, when supported at both ends and loaded in the centre.

RULE.—Multiply the tabular value of S, (see Table 2, Page 197) by the square of the depth in inches, and four times the breadth; divide that product by the length in inches, and the quotient will be the weight in lbs.

Example I.—What weight will break a beam of English Oak 7 inches broad, 9 inches deep, and 30 feet between the props?

$$\frac{1672 \times 81 \times 28}{360} = 10{,}534 \text{ lbs.}$$

Example II.—A beam of Beech, 7 inches deep, 4 inches broad, and 10 feet long, supports a weight of 4 tons; what additional weight will require to be added to break the beam?

$$\frac{1556 \times 49 \times 16}{120} = 10{,}165 - 8960 = 1205 \text{ lbs.}$$

Example III.—What will be the dimensions of a Fir beam 30 feet long between the props, to support a weight of 6000 lbs?

$\frac{6000 \times 360}{1100} = 1963\cdot\dot{6}\dot{3}$ the square of the depth, and 4 times the breadth.

Suppose the breadth 6 inches,

$\frac{1963\cdot\dot{6}\dot{3}}{6 \times 4 = 24} = 81\cdot81$ square of the depth, and $\sqrt{81\cdot81} = 9\cdot5 =$ depth.

Suppose the depth 10 inches,

$$10^2 = 100, \text{ and } \frac{1963\cdot\dot{6}\dot{3}}{100 \times 4} = 4\cdot90 \text{ breadth.}$$

Note 1.—When the beam is uniformly loaded throughout its length, the result must be doubled, *i. e.* it will support double the weight.

Note 2.—When the beam is fixed at both ends and loaded in the middle, one-half of the result must be added; and if the weight is laid uniformly along its length, the result must be tripled.

DEFLECTION OF RECTANGULAR BEAMS OF TIMBER OR CAST IRON.

To ascertain the amount of Deflection of a uniform Beam, loaded in the middle and supported at both ends.

Rule.—Multiply the cube of the length in feet by the weight in lbs., and divide the product by 32 times the tabular value of E, (see Tables, pp. 196 and 197), multiplied by the breadth and the cube of the depth, both in inches, and the quotient is the deflection in inches.

Example.—A beam Ash 10 feet long, 8 inches deep, and 4 inches broad, and loaded with 4000 lbs. in the centre; what is the deflection?

$$10^3 = 1000 \times 4000 = 4{,}000{,}000.$$
$$E = 119 \times 32 \times 4 \times 8^3 = 7{,}798{,}784, \text{ and}$$
$$4{,}000{,}000 \div 7{,}798{,}784 = \cdot 51 \text{ deflection.}$$

To determine the Dimensions of a Rectangular Beam capable of supporting a required weight, with a given degree of deflection, when fixed at one end.

Rule.—Divide the weight to be supported in lbs. by the tabular value of E, (see Tables, pp. 196 and 197) multiplied by the breadth and deflection, both in inches; and the cube root of the quotient, multiplied by the length in feet, equals the depth required in inches.

Example.—A beam of Ash is intended to bear a load of 700 lbs. at its extremity, its length being 5 feet, its breadth 4 inches, and the deflection not to exceed ½ an inch.

Tabular value of $E = 119 \times 4 \times \cdot 5 = 238$, the divisor; then $700 \div 238 = \sqrt[3]{2 \cdot 94} \times 5 = 7 \cdot 25$ inches, depth of the beam.

To find the Dimensions of a Beam capable of sustaining a given weight, with a given degree of deflection, when supported at both ends.

Rule.—Multiply the weight to be supported in lbs. by the cube of the length in feet; divide the product by 32 times the tabular value of E, (see Tables, pp. 196 and 197), multiplied into the given deflection in inches, and the quotient is the breadth multiplied by the cube of the depth in inches.

Note 1.—When the beam is intended to be square, then the fourth root of the quotient is the breadth and depth required.

Note 2.—If the beam is to be cylindrical, multiply the quotient by 1·7, and the fourth root of the product is the diameter.

Example.—The distance between the supports of a beam of Riga fir is 16 feet, and the weight it must be capable of sustaining in the middle of its length is 8000 lbs., with a deflection of not more than $\frac{3}{4}$ of an inch; what must be the depth of the beam, supposing the breadth 8 inches?

$$\frac{16^3 \times 8000}{90 \times 32 \times \cdot 75} = 15{,}175 \div 8 = \sqrt[3]{1897} = 12\cdot 35 \text{ in. the depth.}$$

TRANSVERSE STRENGTH OF CAST IRON BEAMS.*

RECTANGULAR BEAMS—(*See Formulæ, p.* 210.)

PROBLEM I.

To find the Breadth of a uniform Cast Iron Beam to bear a given weight in the middle.

RULE 1.—Multiply the length of bearing in feet, or the length between the supports, by the weight to be supported in lbs., and divide this product by 850 times the square of the depth in inches; the quotient will be the breadth in inches required.

RULE 2.—Multiply the length of bearing in feet, by the weight to be supported in lbs., and divide this product by 850 times the breadth in inches; and the square root of the quotient will be the depth in inches.

When no particular breadth or depth is determined by the nature of the situation for which the beam is intended, it will be found sometimes convenient to assign some proportion; as, for example, let the breadth be the n^{th} part of the depth, n representing any number at will. Then the Rule is as follows:—

Multiply n times the length in feet by the weight in lbs.; divide this product by 850, and the cube root of the quotient will be the depth required,—and the breadth will be the n^{th} part of the depth.

Note.—It may be remarked here, that the Rules are the same for inclined as for horizontal beams, when the horizontal distance between the supports is taken for the length of bearing.

Example I.—What is the breadth of a Beam 20 feet long, 15 inches deep, and to be loaded with 13 tons?

13 tons = 29,120 lbs.

$$\frac{29{,}120 \times 20}{15^2 \times 850} = 3\cdot 045 \text{ inches broad.}$$

Example II.—What is the depth of a Beam 20 feet long, 3 inches broad, and to support a weight of 13 tons?

$$\frac{29{,}120 \times 20}{850 \times 3} = 225,$$ the square root of which is 15 inches, the depth required.

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* See Tredgold's Practical Essay on the Strength of Cast Iron.—Page 80.

Example III.—What are the cross sectional dimensions of a Beam 30 feet long, and of sufficient strength to support a weight of 10 tons; the depth being twice the breadth?

n will therefore be $= 2$, and 10 tons $= 22{,}400$ lbs.

Length $= 30$, and $30 \times \overset{n}{2} = 60$; $\frac{22{,}400 \times 60}{850} = 1581$, the cube root of which is nearly $11\frac{1}{2}$, which is equal to the depth in inches: the breadth is the half of the depth $= 5\frac{3}{4}$ inches.

When the Dimensions of a Beam are given, to find the weight.

Rule.—Multiply 850 times the square of the depth by the breadth, and divide by the length in feet; the quotient will be the weight in lbs. which the beam will carry.

Example IV.—What weight will a beam of the following dimensions bear?

Length, 20 feet; Breadth, $2\frac{1}{4}$ inches; Depth, 12 inches.

$$\frac{12^2 \times 850 \times 2{\cdot}25}{20} = 13{,}770 \text{ lbs. weight; or } \overset{\text{Tons.}}{6} : \overset{\text{Cwts.}}{2} : \overset{\text{Qrs.}}{3} : \overset{\text{Lbs.}}{22}$$

PROBLEM II.

To find the Breadth, when the load is not in the middle between the supports.

Rule.—Multiply the short length by the long length, and four times this product divided by the whole length between the supports will give the effective leverage of the load in feet; this quotient being used instead of the length, in any of the Rules in the foregoing Problem, the breadth and depth will be found by them.

Example.—What are the cross sectional dimensions of a Beam 12 feet long, snpporting a weight of 15 tons, 3 feet from one end, when the breadth is a fourth of the depth?

$\frac{3 \times 9 \times 4}{12} = 9$; $9 \times \overset{n}{4} = 36$; 15 tons $= 33{,}600$ lbs.;

then, $\frac{33{,}600 \times 36}{850} = 1423$, the cube root of which is $11\frac{1}{4}$, the depth: the breadth will be $\frac{11\frac{1}{4}}{4} = 2\frac{13}{16}$.

PROBLEM III.

To find the Breadth, when the load is uniformly distributed over the length of the beam.

Rule.—The same Rules apply as in Prob. I., only the divisor is changed from 850 to 1700; *i. e.* when the load is uniformly distributed over the length of the beam, it supports double the weight that it would do were the load laid on the middle.

Note.—Examples in Problem I. apply to this Problem, only changing the divisors, or halving the quotients.

PROBLEM IV.

To find the Dimensions, when a beam is fixed at one end and loaded at the other, or when it is supported at the middle and loaded at both ends.

Rule.—Take the horizontal length of the projection of the beam, when fixed at one end, for the length, and apply the Rules in Prob. I., only using the divisor 212 instead of 850.

When the beam is supported any where between the two ends, multiply the length from the prop by the weight hung at the end, and apply the remainder of the Rule as in Prob. I., only using 212 for 850.

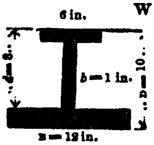
When the load is uniformly distributed over the length of the projection, employ 425 instead of 212 as a divisor.

Note.—The lateral strength of Wrought Iron, as compared with Cast Iron, is as 14 to 9. Mr. Barlow finds that Wrought Iron bars, 3 inches deep, 1½ inch thick, and 33 inches between the supports, will carry 4½ tons.

Professor Hodgkinson has determined that the following is the strongest form of section for Cast Iron Beams, carrying a load in the middle and supported at both ends,—the under side being a Parabola in the direction of its length, and having two-thirds of the section given to the lower flange.

The formula for the breaking weight is thus,—

$$W = \tfrac{2}{3}\,\frac{B\,D^3 - (B - b)\,d^3}{D\,L}$$



Where—W = breaking weight.
L = length in feet.
$B\ b$ = breadths in inches.
$D\ d$ = depths in inches.

What weight will such a beam carry, 20 feet long between the supports? The cross sectional area is 36 inches, of which the lower flange contains 24 inches, or two-thirds; then

$D^3 \times B$ is $\overline{10 \times 10 \times 10} \times 12 = 12000\cdot$

and $(B - b) \times d^3$ is $11 \times \overline{8 \times 8 \times 8} = 5632\cdot$

Then $D \times L$ is $10 \times 20 = 200)6368\cdot$

Of which take ⅔, 31·84
2
3)63·68

and we have the ultimate weight the beam will carry, or .... 21·22 tons.

Mr. Hodgkinson also gives the following approximate Rule for calculating the breaking weight of beams of similar section.

Rule.—Multiply the area of the section of the lower flange in the middle of the beam by the depth of the beam, both in inches, and divide the product by the length of the beam between the supports, in feet; the quotient multiplied by 2·14 gives the breaking weight in tons.

Note 1.—No notice is taken of the top flange in this calculation, as it adds so little to the strength.

Note 2.—Cast Iron Beams should not be loaded to more than one-fifth of their ultimate strength.

CYLINDRICAL BEAMS—(*See Formulæ*, p. 210.)

To find the Diameter of a solid Cylinder to support a given weight in the middle,—between the middle and the end,—and when the weight is uniformly distributed over the length,—also, when fixed at one end.

1. *When the weight is placed in the middle.*

Rule.—Multiply the weight in ℔s. by the length in feet; divide this product by 500, and the cube root of the quotient will be the diameter in inches.

2. *When the weight is between the middle and the end.*

Rule.—Multiply the short end by the long end; then multiply that product by the weight in ℔s.; divide this product by 125 times the length in feet, and the cube root of the quotient will be the diameter in inches.

3. *When the load is uniformly distributed over the length.*

Rule.—Multiply the length in feet by the weight in ℔s., divide this product by 1000, and the cube root of the quotient will be the diameter in inches.

4. *When fixed at one end, and the load applied at the other.*

Rule.—Multiply the length of projection in feet by the weight in ℔s., divide this product by 125, and the cube root of the quotient will be the diameter in inches.

A Hollow Cylinder is both stronger and stiffer than a solid one containing the same quantity of matter.

The strength of a Tube, or Hollow Cylinder, is to the strength of a Solid one as the difference between the fourth powers of the exterior and the interior diameters of the tube, divided by the exterior diameter, is to the cube of the diameter of a Solid Cylinder,—the quantity of matter in each being the same. *Hence, from this it will be found, that a Hollow Cylinder is one-half stronger than a Solid one having the same weight of material.*

SQUARE BEAMS.—(*See Formulæ*, p. 210.)

1. *When the Beam is square, supported horizontally at the ends, loaded in the middle, and the direction of the straining force parallel to the side.*

a. Given, the length of bearing, and the side of the square; to find the load that the beam will sustain.

RULE.—Divide 850 times the cube of the side in inches, by the length of bearing in feet, and the quotient will be the load required in lbs.

b. Given, the length of bearing, and the load; to find the side of the square.

RULE.—Multiply the length of bearing in feet by the load in lbs.; divide the product by 850, and the cube root of the quotient is the side of the square required in inches.

2. *When the Beam is square, supported horizontally at the ends, loaded at some intermediate point, and the direction of the straining force parallel to the side.*

a. Given, the length of bearing, the side, and the segments of the length; to find the load.

RULE.—Divide 212 times the length of bearing in feet, drawn into the cube of the side in inches, by the rectangle of the segments of the length, and the quotient will be the load required in lbs.

b. Given, the length of bearing, the load, and the segments of the length; to find the side of the square.

RULE.—Multiply the rectangle of the segments of the length by the load in lbs.; divide the product by 212 times the sum of the segments, or length of bearing in feet, and extract the cube root of the quotient for the side of the square required.

c. Given, the length of bearing, the load, and the side of the square; to find the segments of the length separately.

RULE.—Multiply 850 times the length of bearing in feet by the cube of the side in inches; divide the product by the given load, and subtract the quotient from the square of the length in feet; then, to or from the length add or subtract the square root of the remainder, and half the sum, or half the difference, will give the greater or lesser segment accordingly.

Note.—The Rules just given for the square beam, when the direction of the straining force is parallel to the side, apply also to the case when the direction of the force coincides with the vertical diagonal, provided 600 be substituted for 850, and 150 for 212.

TUBULAR BEAMS.—*(See Formulæ, p. 210.)*

1. *When the Beam is tubular, supported horizontally at the ends, and loaded in the middle.*

a. Given, the length of bearing, the exterior diameter, and the quotient of the interior diameter divided by the exterior; to find the load that the beam will sustain.

RULE.—From unity subtract the fourth power of the quotient that arises, when the interior diameter is divided by the exterior; multiply the remainder by 500 times the cube of the exterior diameter in inches; then, divide the product by the length of bearing in feet, and the quotient will be the load in lbs. that the beam will sustain.

b. Given, the quotient (·7166) that arises when the interior diameter is divided by the exterior diameter of the beam, the length of bearing, and the load; to find the exterior diameter.

RULE.—Multiply the length of bearing by the given load; then divide the product by 500 times the difference between unity and the fourth power of the quotient (·7166) that arises when the interior diameter is divided by the exterior, and extract the cube root of the quotient for the exterior diameter required.

2. *When the Beam is tubular, supported horizontally at the ends, and loaded at some intermediate point.*—(See Note, p. 211.)

a. Given, the exterior diameter, the length of bearing, and the segments of the length; to find the load that the beam will sustain.

RULE.—Divide 92 times the length of bearing in feet, drawn into the cube of the diameter in inches, by the rectangle of the segments of the length, and the quotient will be the load that the beam will sustain.

b. Given, the length of bearing, the load, and the segments of the length; to find the exterior diameter.

RULE.—Multiply the rectangle of the segments of the length by the load in lbs.; divide the product by 92 times the length of bearing, and extract the cube root of the quotient for the diameter required; multiply the diameter thus found by ·7166, and the product is the interior diameter.

c. Given, the exterior diameter, the length of bearing, and the load; to find the segments of the length separately.

RULE.—Multiply 368 times the length of bearing in feet, by the cube of the diameter in inches; divide the product by the load in lbs., and subtract the quotient from the square of the length in feet; then, to or from the length, add or subtract the square root of the remainder, and half the sum, or half the difference, will give the greater or lesser segment accordingly.

d. Given, the exterior diameter, the length of bearing, the segments of the length, and also the quotient that arises when the interior diameter is divided by the exterior; to find the load that the beam will sustain.

RULE.—From unity subtract the fourth power of the quotient that arises when the interior diameter is divided by the exterior; multiply the remainder by 125 times the length of bearing in feet, drawn into the cube of the exterior diameter in inches; then, divide the product by the rectangle of the segments of the length, and the quotient will be the load required in lbs.

e. Given, the length of bearing, the segments of the length, the load, and the quotient that arises when the interior diameter is divided by the exterior; to find the exterior diameter.

RULE.—From unity subtract the fourth power of the interior diameter divided by the exterior; multiply the remainder by 125 times the length of bearing in feet, and reserve the product for a divisor.

Multiply the rectangle of the segments of the length in feet by the load in ℔s.; then, divide the product by the reserved divisor, and extract the cube root of the quotient for the diameter required.

f. Given, the exterior diameter, the length of bearing, the load, and the quotient of the interior diameter divided by the exterior; to find the segments of the length.

RULE.—From unity subtract the fourth power of the interior diameter divided by the exterior; multiply the remainder by 500 times the length of bearing in feet, drawn into the cube of the given diameter in inches, and divide the product by the load in ℔s.; subtract the quotient from the square of the length of bearing in feet; then, to or from the length, add or subtract the square root of the remainder, and half the sum, or half the difference, will give the greater or lesser segment accordingly.

GROOVED BEAMS; OR BEAMS FLANGED TOP AND BOTTOM.

(*See Formulæ, p.* 210.)

1. *When the Beam is grooved, supported horizontally at the ends, and loaded in the middle.*—(See Note, p. 211.)

a. Given, the breadth, the depth, and the length of bearing; to find the load that the beam will sustain.

RULE.—Multiply 668 times the breadth drawn into the square of the depth, both in inches; divide the product by the length of bearing in feet, and the quotient will give the load required in ℔s.

b. Given, the depth, the length of bearing, and the load; to find the breadth.

RULE.—Multiply the length of bearing in feet by the load in ℔s., and divide the product by 668 times the square of the depth in inches, for the breadth required in inches.

c. Given, the breadth, the length of bearing, and the load; to find the depth.

RULE.—Multiply the length of bearing in feet by the load in ℔s., and divide the product by 668 times the breadth in inches; and the square root of the quotient will give the depth required in inches.

2. *When the Beam is grooved, supported horizontally at the ends, and loaded at some intermediate point.*—(See Note, p. 211.)

a. Given, the breadth, the depth, the length of bearing, and the segments of the length; to find the load that the beam will sustain.

Rule.—Multiply 167 times the length of bearing in feet, by the breadth drawn into the square of the depth, both in inches, and divide the product by the rectangle of the segments of the length, for the load required.

b. Given, the depth, the length, the load, and the segments of the length; to find the breadth.

Rule.—Multiply the rectangle of the segments of the length of bearing in feet by the given load in ℔s.; then, divide the product by 167 times the length of bearing in feet, multiplied by the square of the depth, and the quotient will give the breadth required in inches.

c. Given, the breadth, the length, the segments of the length, and the load; to find the depth.

Rule.—Multiply the rectangle of the segments of the length of bearing by the given load, divide the product by 167 times the length of bearing in feet, multiplied by the breadth in inches, and the square root of the quotient is the depth required in inches.

d. Given, the breadth, the depth, the length, and the load; to find the segments of the length, separately.

Rule.—Multiply 668 times the length in feet, drawn into the breadth and square of the depth, both in inches; divide the product by the load in ℔s., and subtract the quotient from the square of the length; then, to or from the length of bearing in feet, add or subtract the square root of the remainder, and half the sum, or half the difference, will give the greater or lesser segment accordingly.

OPEN BEAMS.—*(See Formulæ, p. 210.)*

1. *When the Beam is open, supported horizontally at the ends, and loaded in the middle.*—(See Note, p. 211.)

a. Given, the breadth, the depth, and the length of bearing; to find the load that the beam will sustain.

Rule.—Multiply 558 times the breadth drawn into the square of the depth, both in inches, and divide the product by the length of bearing in feet, for the load to be supported in lbs.

b. Given, the depth, the length, and the load; to find the breadth.

Rule.—Multiply the length of bearing in feet by the given load; then, divide the product by 558 times the square of the depth in inches, and the quotient will be the breadth required in inches.

c. Given, the breadth, the length of bearing, and the load; to find the depth.

Rule.—Multiply the length of bearing in feet by the load to be supported in ℔s., and divide the product by 558 times the breadth in inches, then, the square root of the quotient will be the depth required in inches.

2. *When the Beam is open, supported horizontally at the ends, and loaded at some intermediate point.*—(See Note, p. 211.)

a. Given, the breadth, the depth, the length, and the segments of the length; to find the load that the beam will sustain.

Rule.—Multiply altogether 139 times the length of bearing in feet, the breadth and the square of the depth, both in inches; then, divide the product by the rectangle of the segments of the length in feet, for the load to be supported in lbs.

b. Given, the depth, the length, the segments of the length, and the load; to find the breadth.

Rule—Multiply the rectangle of the segments of the length by the load to be supported in ℔s., and divide the product by 139 times the length of bearing in feet, multiplied by the square of the depth in inches, for the breadth required in inches.

c. Given, the breadth, the length, the segments of the length, and the load; to find the depth.

Rule.—Multiply the rectangle of the segments of the length by the load to be supported in ℔s., and divide the product by 139 times the length of bearing in feet, multiplied by the breadth in inches; then, the square root of the quotient will be the depth in inches.

d. Given, the breadth, the depth, the length, and the load; to find the segments of the length, separately.

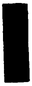
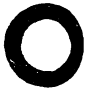
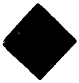
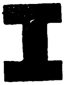
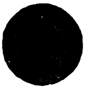
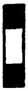
Rule.—Multiply 558 times the length of bearing in feet, by the breadth and square of the depth, both in inches, divide the product by the given load, and subtract the quotient from the square of the length; then, to or from the length, add or subtract the square root of the remainder, and half the sum, or half the difference, will give the greater or lesser segment accordingly.

Bridges.—The greatest extraneous load on a square foot is about 120 ℔s.

Floors.—The least load on a square foot is about 160 ℔s.

Roofs.—If covered with slate, on a square foot, 51¼ ℔s.; if tiled, 56¼ ℔s.

Table of Formulæ of the preceding Rules, showing, at a glance, the mode of calculating the Strength and Dimensions of Cast Iron Beams, when exposed to Transverse Strains from Pressure or Weight.—(See Note, p. 211.)

	Rectangular Beams.	*Form of Section.*		*Tubular Beams.*	*Form of Section.*
1	$lw = 850\,bd^2$		1	$lw = 368\,d^3$	
2	$mnw = 212\,lbd^2$		2	$mnw = 92\,ld^3$	
3	$lw = 1700\,bd^2$		3	$lw = 736\,d^3$	
4	$lw = 212\,bd^2$		4	$lw = 92\,d^3$	
5	$lw = 425\,bd^2$		5	$lw = 184\,d^3$	
6	$lw = 1647\,bd^2$		6	$lw = 713\,d^3$	
	*Square Beams.**	*Form of Section.*		*Grooved Beams.*	*Form of Section.*
1	$lw = 600\,s^3$		1	$lw = 668\,bd^2$	
2	$mnw = 150\,ls^3$		2	$mnw = 167\,lbd^2$	
3	$lw = 1200\,s^3$		3	$lw = 1336\,bd^2$	
4	$lw = 150\,s^3$		4	$lw = 167\,bd^2$	
5	$lw = 300\,s^3$		5	$lw = 334\,bd^2$	
6	$lw \quad 1162\,s^3$		6	$lw = 1294\,bd^2$	
	Cylindric Beams.	*Form of Section.*		*Open Beams.*	*Form of Section.*
1	$lw = 500\,d^3$		1	$lw = 558\,bd^2$	
2	$mnw = 125\,ld^3$		2	$mnw = 139\,lbd^2$	
3	$lw = 1000\,d^3$		3	$lw = 1116\,bd^2$	
4	$lw = 125\,d^3$		4	$lw = 139\,bd^2$	
5	$lw = 250\,d^3$		5	$lw = 279\,bd^2$	
6	$lw = 969\,d^3$		6	$lw = 1081\,bd^2$	

Note.—l = length in feet.
w = weight in lbs.
b = breadth in inches.
d = depth or diameter in inches.
s = side of square in inches.
m = length of long end of beam, or longer segment.
n = length of short end of beam, or shorter segment.

Formulæ 1.—When the beam is supported at the ends, and loaded in the middle.

Formulæ 2.—When the beam is supported at the ends, but the load not in the middle.

Formulæ 3.—When the beam is supported at the ends, and loaded uniformly over the length.

Formulæ 4.—When the beam is fixed at one end, and loaded at the other.

Formulæ 5.—When the beam is fixed at one end, and loaded uniformly over the length.

Formulæ 6.—When the beam is supported at the ends, and the load increases as the distance from one of the supports.

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* This class of equations applies to square beams when the direction of the straining force coincides with the vertical diagonal.

Note 1.—The formulæ for Tubular Beams, in the preceding Table, (page 210), are derived from the supposition that the *exterior diameter* is to the *interior diameter* as 1 is to ·7166; and a Tubular Beam, with this proportion of thickness of metal, will be found to carry *double* the weight of a Solid one, having the same cross sectional area of material.

Note 2.—The formulæ for Grooved Beams are derived from the supposition that the *whole depth* of the beam is to the *grooved depth* as 1 is to 0·7, and the *whole breadth* of the beam is to the *grooved breadths* as 1 is to 0·625.

Note 3.—The formulæ for Open Beams are derived from the supposition that the *whole depth* of the beam is to the *open part* as 1 is to 0·625.

EXAMPLES ILLUSTRATIVE OF THE PRECEDING TABLE.

Rectangular Beam.—1. Given, breadth $b = 2$ inches, depth $d = 12$ inches, and length $l = 20$ feet; what will the beam carry without destroying the elastic force of the material?

$$1.\text{—}l\,w = 850\ b\ d^2$$

$$\frac{850 \times 2 \times 12^2}{20} = \frac{244{,}800}{20} = 12{,}240 \text{ lbs.}$$

The beam itself will weigh 1600 lbs., and which is equivalent to 800 lbs. bearing upon the middle; therefore, 12,240 — 800 = 11,440 lbs., the weight the beam will carry with safety.

Square Beam.—2. Given, square of beam $s = 6$ inches, length $l = 20$ feet, length of long end $m = 12$ feet, and length of short end $n = 8$ feet; what will the beam carry with diagonals vertical, when the weight is applied at 8 feet from one end and 12 feet from the other?

$$2.\text{—}m\ n\ w = 150\ l\ s^3$$

$$\frac{150 \times 20 \times 6^3}{12 \times 8} = \frac{648{,}000}{96} = 6750 \text{ lbs.}$$

The beam itself weighs 2400 lbs., and this is equivalent to 1152 lbs. bearing upon the point where the load is applied; therefore, 6750 — 1152 = 5598 lbs., the weight the beam will carry without having its elastic force destroyed.

Cylindric Beam.—3. Given, diameter of beam $d = 6$ inches, length $l = 20$ feet; what weight will it carry distributed uniformly over the length?

$$3.\text{—}l\ w = 1000\ d^3$$

$$\frac{1000 \times 6^3}{20} = \frac{216{,}000}{20} = 10{,}800 \text{ lbs.}$$

The beam itself weighs 1885 lbs.; therefore, 10,800 — 942 = 9858 lbs., the weight the beam will bear without having its elastic force destroyed.

Tubular Beam.—4. Given, exterior diameter $d = 6$ inches, length $l = 8$ feet, fixed out from wall; what weight will it carry at the end?

$$4.—l\,w = 92\,d^3$$

$\dfrac{92 \times 6^3}{8} = \dfrac{19{,}872}{8} = 2484$ lbs., including the weight of the tube.

Grooved Beam.—5. Given, breadth $b = 6$ inches, depth $d = 18$ inches, and length $l = 8$ feet; what weight will it carry loaded uniformly over its length?

$$5.—l\,w = 334\,b\,d^2$$

$\dfrac{334 \times 6 \times 18^2}{8} = \dfrac{649{,}296}{8} = 81{,}162$ lbs., including half weight of beam itself, which must be deducted, and we have the weight the beam will carry without having its elastic force destroyed.

Open Beam.—6. Given, breadth $b = 3$ inches, depth $d = 18$ inches, and length $l = 20$ feet; what weight will it carry supported at the ends, and the load increasing as the distance from one of the supports?

$$6.—l\,w = 1081\,b\,d^2$$

$\dfrac{1081 \times 3 \times 18^2}{20} = \dfrac{1{,}050{,}732}{20} = 52{,}536$ lbs., the whole weight sustained, including weight of the beam.

ON THE STRENGTH OF COLUMNS,

OR POWER OF RESISTANCE TO COMPRESSIVE FORCE.

When a piece of timber, or cast iron or other body, is employed as a column or support, its tendency to yielding by compression is different according to the proportion between its length and area of its cross section; and supposing the form that of a cylinder, whose length is less than seven or eight times its diameter, it is impossible to bend it by any force applied longitudinally, as it will be destroyed by splitting before that bending can take place; but when the length exceeds this, the column will bend under a certain load, and be ultimately destroyed by a similar kind of action to that which has place in the transverse strain.

When the length of a cast iron column with flat ends equals about thirty times its diameter, fracture will be produced wholly by bending of the material;—when of less length, fracture takes place partly by crushing and partly by bending; but, when the column is enlarged in the middle of its length from one and a half to twice its diameter at the ends, by being cast hollow, the strength is greater by one-seventh than in a solid column containing the same quantity of material.

Table of Practical Formulæ by which to determine the Amount of Weight a column of given Dimensions will support, in lbs.

For a rectangular column of cast iron . $W = \dfrac{15{,}300\, l\, b^3}{4\, b^2 + {\cdot}18\, l^2}$.

For a rectangular column of malleable iron $W = \dfrac{17{,}800\, l\, b^3}{4\, b^2 + {\cdot}16\, l^2}$.

For a rectangular column of oak . . $W = \dfrac{3960\, l\, b^3}{4\, b^2 + {\cdot}5\, l^2}$.

For a solid cylinder of cast iron . . $W = \dfrac{9562\, d^4}{4\, d^2 + {\cdot}18\, l^2}$.

For a solid cylinder of malleable iron . $W = \dfrac{11{,}125\, d^4}{4\, d^2 + {\cdot}16\, l^2}$.

For a solid cylinder of oak . . . $W = \dfrac{2470\, d^4}{4\, d^2 + {\cdot}5\, l^2}$.

Note—W = the weight the column will support in lbs.
b = the breadth in inches.
l = the length in feet.
d = the diameter in inches.

Example I.—A rectangular column of Oak, 6 inches on the side, and 12 feet in length; what weight will it support?

$$\frac{3960 \times 12 \times 6^3}{4 \times 6^2 + {\cdot}5 \times 12^2} = \frac{10{,}264{,}320}{216} = 47{,}520 \text{ lbs.}$$

Example II.—What weight will a cast iron cylinder support, whose diameter is 5 inches, and length 10 feet?

$$\frac{9562 \times 5^4}{4 \times 5^2 + {\cdot}18 \times 10^2} = \frac{5{,}976{,}250}{118} = 50{,}646 \text{ lbs.}$$

Table to show the Weight or Pressure a Column of Cast Iron will sustain with safety.

Length or height in feet.	4	6	8	10	12	14	16	18	20	22	24
Diameter.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.	Weight in cwts.
2½ in.	119	105	91	77	65	55	47	40	34	29	25
3	178	163	145	128	111	97	84	73	64	56	49
3½	247	232	214	191	172	156	135	119	106	94	83
4	326	310	288	266	242	220	198	178	160	144	130
4½	418	400	379	354	327	301	275	251	229	208	180
5	522	501	479	452	427	394	365	337	310	285	262
6	607	592	573	550	525	497	469	440	413	386	360
7	1032	1013	989	959	924	887	848	808	765	725	686
8	1333	1315	1289	1259	1224	1185	1142	1097	1052	1005	959
9	1716	1697	1672	1640	1603	1561	1515	1467	1416	1364	1311
10	2119	2100	2077	2045	2007	1964	1916	1865	1811	1755	1697
11	2570	2550	2520	2490	2450	2410	2358	2305	2248	2189	2127
12	3050	3040	3020	2970	2930	2900	2830	2780	2730	2670	2600

Relative strength of long columns of different materials, cast iron being 1000:—

Steel = 2518
Wrought Iron = 1745
Dantzic Oak = 108·8
Red Deal = 78·5

REVOLVING SHAFTS.

Elasticity of Torsion, or Resistance of Bodies to being twisted.

The angle of flexure by torsion is, as the length and extensibility of the body directly and inversely as the diameter. Hence, the length of a bar or shaft being given, the power, and the leverage the power acts with, being known, and also the number of degrees of torsion that will not affect the action of the machine, the size of the shaft, with a given angle of flexure, can be ascertained.

To determine the Diameter of a Cylindrical Cast Iron Shaft to resist Torsion with a given flexure.

RULE.—Multiply the power in lbs. by the length of the shaft in feet, and by the leverage in feet; divide the product by 55 times the number of degrees in the angle of torsion, and the fourth root of the quotient equals the shaft's diameter in inches.

Example.—Required the diameter of a series of shafts, 30 feet in length, and to transmit a power equal to 4000 lbs., acting at the circumference of a wheel of 2 feet radius, so that the twist of the shafts on the application of the power may not exceed one degree.

$$\frac{4000 \times 30 \times 2}{55 \times 1} = \sqrt[4]{4364} = 8{\cdot}13 \text{ inches diameter.}$$

To determine the Diameter of a Hollow Cylindrical Cast Iron Shaft to resist Torsion with a given flexure, the thickness of metal being one-fifth of the exterior diameter.

RULE.—Multiply the power in lbs. by the length of the shaft in feet, and by the leverage in feet; divide this product by 48 times the number of degrees in the angle of torsion, and the fourth root of the quotient is the *exterior* diameter of the shaft: multiply this exterior diameter by 0·6, and the product is the *interior* diameter.

Example.—Required the diameter of a hollow cylindrical cast iron shaft, 26 feet long, to transmit a power of 2000 lbs., acting at the circumference of a wheel whose radius is 9 feet; the flexure, or twisting, not to exceed half a degree.

$$\frac{26 \times 9 \times 2000}{48 \times 0{\cdot}5} = \sqrt[4]{19{,}500} = 11{\cdot}81 \text{ inches, exterior diameter;}$$ and $11{\cdot}81 \times 0{\cdot}6 = 7{\cdot}086$ inches, interior diameter.

Note.—For a wrought iron hollow cylindrical shaft, use 62 for a divisor, instead of 48.

To determine the Side of a Square Cast Iron Shaft to resist Torsion with a given flexure.

RULE.—Multiply the power in lbs. by the leverage it acts with in feet, and also by the length of the shaft in feet; divide this product by 92·5 times the angle of flexure in degrees, and the square root of the quotient equals the area of the shaft in inches.

Example.—Suppose the length of a shaft to be 12 feet, and to be driven by a power equal to 700 lbs., acting at one foot from the centre of the shaft,—required the area of cross section, so that it may not exceed one degree of flexure.

$\frac{700 \times 1 \times 12}{92\cdot5 \times 1} = \sqrt[3]{90\cdot8} = 9\cdot53$ inches area, or $3\frac{1}{8}$ inches square, nearly.

Relative Strength of Bodies to resist Torsion, Cast Iron being 1.

Tin	= ·155	Swedish Iron	= 1·05
Copper	= ·48	English do.	= 1·12
Yellow Brass	= ·511	Blistered Steel	= 1·84
Gun Metal	= ·55	Shear do.	= 1·96
Cast Iron	= 1·00	Cast do.	= 2·10

Proportions of Cast Iron Shaft Journals of First Movers to Engine Power and Speed.

Horse-power of Engine.	Revolutions per Minute.									
	10	15	20	25	30	40	50	60	70	80
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
4	5·5	4·8	4·5	4·0	3·7	3·5	3·2	3·0	2·9	2·8
5	5·9	5·1	4·7	4·4	4·1	3·7	3·5	3·3	3·1	3·0
6	6·3	5·5	5·0	4·6	4·4	4·0	3·7	3·5	3·4	3·2
7	6·6	5·8	5·2	4·9	4·6	4·2	3·9	3·6	3·5	3·4
8	6·9	6·0	5·5	5·1	4·8	4·4	4·1	3·9	3·7	3·5
9	7·2	6·3	5·7	5·5	5·0	4·5	4·2	4·0	3·7	3·6
10	7·4	6·6	5·9	5·6	5·2	4·7	4·4	4·1	3·9	3·7
12	7·9	6·9	6·3	5·8	5·6	5·2	4·8	4·3	4·1	3·9
15	8·5	7·4	7·0	6·4	6·0	5·5	5·1	4·6	4·5	4·3
20	9·3	8·1	7·4	7·2	6·6	5·9	5·6	5·2	5·0	4·6
25	10·0	8·5	8·0	7·4	7·1	6·3	5·9	5·5	5·3	5·0
30	10·7	9·3	8·4	7·9	7·4	6·9	6·5	5·9	5·7	5·5
40	11·7	10·5	9·3	8·8	8·3	7·4	6·9	6·6	6·2	5·9
50	12·6	11·0	10·0	9·3	9·0	8·0	7·4	7·2	6·8	6·5
60	13·6	12·0	10·8	10·0	9·3	8·6	7·7	7·4	7·2	6·8

JOURNALS OF REVOLVING SHAFTS.

To find the Horses' Power, the revolutions and diameters of Journal being given.

RULE.—The cube of the diameter of journal divided by 300, multiplied by the number of revolutions is the horses' power.

Thus,—$\frac{\text{Diameter of journal}^3}{300} \times \text{revolutions} = \text{horses' power.}$

To find the Diameter, the horses' power and revolutions being given.

RULE.—Multiply the horses' power by 300; divide the product by the number of revolutions per minute, and the cube root of the quotient is the diameter of the journal.

Thus,—$\sqrt[3]{\frac{\text{Horses' power} \times 300}{\text{revolutions}}} = \text{diameter of journal.}$

A Table of the Depths of Square Beams or Bars of Cast Iron, calculated to support from 1 Cwt. to 14 Tons in the Middle, the Deflection not to exceed $\frac{1}{40}$th of an Inch for each Foot in Length.

Lengths in Feet.		4	6	8	10	12	14	16	18	20	22	24	26	28	30
Weight in cwts.	Weight in lbs.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1 cwt.	112	1·2	1·4	1·7	1·9	2·0	2·2	2·4	2·5	2·6	2·7	2·9	3·0	3·1	3·2
2	224	1·4	1·7	2·0	2·2	2·4	2·6	2·8	3·0	3·1	3·3	3·4	3·6	3·7	3·8
3	336	1·6	1·9	2·2	2·4	2·7	2·9	3·1	3·3	3·4	3·6	3·8	3·9	4·1	4·2
4	448	1·7	2·0	2·4	2·6	2·9	3·1	3·3	3·5	3·7	3·9	4·0	4·2	4·3	4·5
5	560	1·8	2·2	2·5	2·8	3·0	3·3	3·5	3·7	3·9	4·1	4·3	4·4	4·6	4·8
6	672	1·8	2·2	2·6	2·9	3·2	3·4	3·7	3·9	4·1	4·3	4·5	4·6	4·8	5·0
7	784	1·9	2·3	2·7	3·0	3·3	3·6	3·8	4·1	4·2	4·4	4·6	4·8	5·0	5·2
8	896	2·0	2·4	2·8	3·1	3·4	3·7	3·9	4·2	4·4	4·6	4·8	5·0	5·2	5·4
9	1,008	2·0	2·5	2·9	3·2	3·5	3·8	4·0	4·3	4·5	4·7	4·9	5·1	5·3	5·5
10	1,120	2·1	2·6	3·0	3·3	3·6	3·9	4·2	4·4	4·7	4·9	5·2	5·3	5·4	5·7
11	1,232	2·1	2·6	3·0	3·4	3·7	4·0	4·3	4·5	4·8	5·0	5·3	5·4	5·6	5·8
12	1,344	2·2	2·7	3·1	3·5	3·8	4·1	4·4	4·7	4·9	5·1	5·3	5·5	5·7	5·9
13	1,456	2·2	2·7	3·1	3·5	3·8	4·2	4·4	4·7	4·9	5·2	5·4	5·6	5·9	6·0
14	1,568	2·3	2·8	3·2	3·6	3·9	4·2	4·5	4·8	5·0	5·3	5·5	5·7	6·0	6·1
15	1,680	2·3	2·8	3·2	3·6	4·0	4·3	4·6	4·9	5·2	5·4	5·6	5·8	6·1	6·2
16	1,792	2·4	2·9	3·3	3·7	4·0	4·4	4·7	5·0	5·2	5·5	5·7	5·9	6·2	6·4
17	1,904	2·4	2·9	3·4	3·8	4·1	4·4	4·7	5·0	5·3	5·5	5·8	6·0	6·2	6·5
18	2,016	2·4	3·0	3·4	3·8	4·2	4·5	4·8	5·1	5·4	5·6	5·9	6·1	6·4	6·6
19	2,128	2·5	3·0	3·5	3·9	4·2	4·6	4·9	5·2	5·4	5·7	6·0	6·2	6·5	6·7
1 ton.	2,240	2·5	3·0	3·5	3·9	4·3	4·6	4·9	5·2	5·5	5·8	6·0	6·3	6·5	6·8
1¼	2,800	2·6	3·2	3·7	4·1	4·5	4·9	5·2	5·5	5·8	6·1	6·4	6·6	6·9	7·2
1½	3,360	2·8	3·4	3·9	4·3	4·7	5·1	5·5	5·8	6·1	6·4	6·7	7·0	7·2	7·5
1¾	3,920	2·9	3·5	4·0	4·5	4·9	5·3	5·7	6·0	6·3	6·7	6·9	7·2	7·5	7·7
2	4,480	2·9	3·5	4·1	4·7	5·1	5·5	5·9	6·2	6·5	6·8	7·2	7·6	7·7	8·0
2½	5,600	3·1	3·8	4·4	4·9	5·5	5·8	6·2	6·6	6·9	7·3	7·6	7·9	8·2	8·5
3	6,720	3·3	4·0	4·6	5·1	5·7	6·1	6·5	6·9	7·3	7·6	7·9	8·3	8·6	8·9
3½	7,840	3·4	4·1	4·8	5·3	5·8	6·3	6·7	7·1	7·5	7·9	8·2	8·6	8·9	9·2
4	8,960	3·5	4·3	4·9	5·5	6·0	6·5	7·0	7·4	7·8	8·2	8·5	8·9	9·2	9·5
4½	10,080		4·4	5·1	5·7	6·2	6·7	7·2	7·6	8·0	8·4	8·8	9·1	9·5	9·8
5	11,200		4·5	5·2	5·8	6·4	6·9	7·4	7·8	8·2	8·6	9·0	9·4	9·7	10·1
6	13,440			5·5	6·1	6·7	7·2	7·7	8·2	8·6	9·0	9·4	9·8	10·2	10·5
7	15,680			5·7	6·3	6·9	7·5	8·0	8·5	8·9	9·4	9·8	10·2	10·6	11·0
8	17,920			5·9	6·6	7·2	7·8	8·3	8·8	9·3	9·7	10·1	10·6	10·9	11·3
9	20,160			6·0	6·8	7·4	8·0	8·5	9·0	9·5	10·0	10·4	10·9	11·3	11·7
10	22,400				6·9	7·6	8·2	8·8	9·3	9·8	10·3	10·7	11·2	11·6	12·0
11	24,640				7·1	7·8	8·4	9·0	9·5	10·0	10·5	11·0	11·5	11·9	12·3
12	26,880				7·2	7·9	8·6	9·2	9·7	10·2	10·8	11·2	11·7	12·1	12·5
13	29,120				7·4	8·1	8·8	9·4	9·9	10·4	11·0	11·5	11·9	12·4	12·8
14	31,360				7·5	8·3	8·9	9·5	10·1	10·6	11·1	11·7	12·1	12·6	13·0
Deflect. in inches.		·1	·15	·2	·25	·3	·35	·4	·45	·5	·55	·6	·65	·7	·75

Lengths in Feet.		10	12	14	16	18	20	22	24	26	28	30	32	34	36
15	33,600	7·7	8·4	9·1	9·7	10·3	10·8	11·4	11·9	12·3	12·8	13·2	13·7	14·1	14·5
16	35,840	7·8	8·5	9·2	9·8	10·4	11·0	11·5	12·0	12·5	13·0	13·5	13·9	14·3	14·7
17	38,080	7·9	8·7	9·4	10·0	10·6	11·2	11·7	12·2	12·7	13·2	13·7	14·1	14·5	14·9
18	40,320	8·0	8·8	9·5	10·1	10·8	11·3	11·9	12·4	12·9	13·4	13·9	14·3	14·7	15·1
19	42,560	8·1	8·9	9·6	10·3	10·9	11·5	12·2	12·6	13·1	13·6	14·1	14·5	15·0	15·4
20	44,800		9·0	9·7	10·4	11·0	11·6	12·5	12·7	13·2	13·8	14·2	14·7	15·1	15·6
22	49,280		9·2	10·0	10·7	11·3	11·9	12·8	13·0	13·6	14·1	14·6	15·1	15·5	15·9
24	53,760		9·4	10·2	10·9	11·5	12·2	13·0	13·4	13·9	14·4	14·9	15·4	15·9	16·3
26	58,240		9·6	10·4	11·1	11·8	12·4	13·3	13·6	14·2	14·7	15·2	15·7	16·2	16·7
28	62,720		9·8	10·6	11·4	12·0	12·7	13·5	13·9	14·4	15·0	15·5	16·0	16·5	17·0
Deflect. in inches.		·25	·3	·35	·4	·45	·5	·55	·6	·66	·7	·75	·8	·85	·9

[See next Page.]

Concluded from the Preceding Page.

Lengths in Feet.		14	16	18	20	22	24	26	28	30	32	34	36	38	40
Weight in tons.	Weight in lbs.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.	Depth.
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
30	67,200	10·8	11·5	12·2	12·9	13·5	14·1	14·7	15·2	15·7	16·3	16·8	17·3	17·7	18·2
32	71,680	11·0	11·7	12·4	13·1	13·7	14·3	14·9	15·5	16·0	16·5	17·0	17·5	18·0	18·5
34	76,160	11·1	11·9	12·6	13·3	13·9	14·5	15·1	15·7	16·2	16·8	17·3	17·8	18·3	18·8
36	80,640	11·3	12·0	12·8	13·4	14·1	14·7	15·3	15·9	16·5	17·0	17·5	18·0	18·5	19·0
38	85,120	11·4	12·2	13·0	13·6	14·3	14·9	15·5	16·1	16·7	17·2	17·8	18·3	18·8	19·3
40	89,600		12·4	13·1	13·8	14·5	15·1	15·7	16·4	16·9	17·5	18·0	18·5	19·1	19·5
42	94,080		12·5	13·3	14·0	14·7	15·3	15·9	16·5	17·1	17·7	18·2	18·7	19·3	19·8
44	98,560		12·7	13·5	14·2	14·9	15·5	16·1	16·8	17·4	17·9	18·5	19·0	19·5	20·0
46	103,040		12·8	13·6	14·3	15·0	15·7	16·3	17·0	17·6	18·1	18·7	19·2	19·8	20·3
48	107,520		13·0	13·7	14·5	15·2	15·9	16·5	17·1	17·7	18·3	18·8	19·4	20·0	20·5
50	112,000			13·8	14·6	15·3	16·0	16·6	17·3	17·9	18·5	19·0	19·6	20·1	20·7
52	116,480			14·0	14·7	15·5	16·2	16·8	17·5	18·1	18·7	19·2	19·8	20·3	21·0
54	120,960			14·1	14·9	15·7	16·3	17·0	17·6	18·2	18·8	19·4	19·9	20·5	21·1
56	125,440			14·3	15·0	15·8	16·5	17·1	17·8	18·4	19·0	19·6	20·1	20·7	21·3
58	129,920			14·4	15·1	15·9	16·6	17·3	17·9	18·5	19·2	19·7	20·3	20·9	21·4
60	134,400			14·5	15·3	16·0	16·7	17·4	18·1	18·7	19·3	19·9	20·5	21·1	21·6
Deflect. in inches.		·35	·4	·45	·5	·55	·6	·65	·7	·75	·8	·85	·9	·95	1.0

Examples illustrative of the Table.—1. To find the depth of a rectangular bar of cast iron to support a weight of 10 tons in the middle of its length, the deflection not to exceed $\frac{1}{40}$th of an inch per foot in length, and its length 20 feet, also let the depth be six times the breadth.

Opposite six times the weight and under 20 feet in length is 15·3 inches, the depth, and $\frac{1}{6}$th of 15·3 = 2·6 inches, the breadth.

2. To find the diameter for a cast iron shaft or solid cylinder that will bear a given pressure, the flexure in the middle not to exceed $\frac{1}{40}$th of an inch for each foot of its length, the distance of the bearings being 20 feet, and the pressure on the middle equals 10 tons.

Constant multiplier 1·7 for round shafts, then 10 × 1·7 = 17; and opposite 17 tons and under 20 feet is 11·2 inches for the diameter.

But half that flexure is quite enough for revolving shafts: hence 17 × 2 = 34 tons, and opposite 34 tons is 13·3 inches for the diameter.

TEETH OF WHEELS.

PROPORTIONS FOR THE CONSTRUCTION OF TOOTHED WHEELS.

Length of the teeth = $\frac{7}{8}$ of the pitch.
Thickness „ = $\frac{4}{9}$ do.
Breadth on face = 2½ times the pitch.
Edge of the rim, Projecting rib inside do., Thickness of flat arms — each $\frac{4}{9}$ of the pitch.

been deduced, like the other results, from experiments on bars 4 feet 6 inches between the supports,—let 4·5 represent this distance of 4 feet 6 inches, and then, the given breadth of the bar, in inches, being multiplied by the square of the depth in inches, the product by 4·5, and this product again by the number against the given description of iron in the column (S.) of mean breaking weights, the last product will give the breaking weight required, in lbs.

Example.—What weight would break a bar of Ponkey iron, having a breadth of 2 inches, a depth of 4 inches, and 6 feet between the supports?

$$\frac{2 \times 16 \times 4·5 \times 581}{6} = 13{,}944 \text{ lbs. Ans.}$$

Abstract of the Results of Experiments to determine the ultimate tensile and compressive, or crushing forces, of various denominations of Cast Iron in common use.

Description of the Iron.	Tensile Strength per square Inch of Section.	Height of Specimen.	Crushing Strength per square Inch of Section.	Ratio of the Powers to resist Tension and Compression.	
	Tons.	In.	Tons.		Mean.
Low Moor (No. 1)	5·667	¾ 1½	28·809 25·198	1 : 5·084 1 : 4·446	1 : 4·765
Low Moor (No. 2)	6·901	¾ 1½	44·430 41·219	1 : 6·438 1 : 5·973	1 : 6·205
Clyde (No. 1)	7·198	¾ 1½	41·459 39·616	1 : 5·759 1 : 5·503	1 : 5·631
Clyde (No. 2)	7·949	¾ 1½	49·103 45·549	1 : 6·177 1 : 5·729	1 : 5·953
Clyde (No. 3)	10·477	¾ 1½	47·855 46·821	1 : 4·568 1 : 4·469	1 : 4·518
Blaenavon (No. 1)............	6·222	¾ 1½	40·562 35·964	1 : 6·519 1 : 5·780	1 : 6·149
Blaenavon (No. 2, 1st sample)	7·466	¾ 1½	52·502 45·717	1 : 7·032 1 : 6·123	1 : 6·577
Blaenavon (No. 2, 2nd sample)	6·380	¾ 1½	30·606 30·594	1 : 4·797 1 : 4·795	1 : 4·796
Calder (No. 1)................	6·131	¾ 1½	32·229 33·921	1 : 5·256 1 : 5·532	1 : 5·394
Coltness (No. 3)	6·820	¾ 1½	44·723 45·460	1 : 6·557 1 : 6·665	1 : 6·611
Brymbo (No. 1)	6·440	¾ 1½	33·399 33·784	1 : 5·186 1 : 5·246	1 : 5·216
Brymbo (No. 3)	6·923	¾ 1½	33·988 34·356	1 : 4·909 1 : 4·963	1 : 4·936
Bowling Iron (No. 2)..........	6·032	¾ 1½	33·987 33·028	1 : 5·635 1 : 5·476	1 : 5·555
Ystalyfera, anthracite (No. 2)	6·478	¾ 1½	44·610 42·660	1 : 6·886 1 : 6·585	1 : 6·735
Yniscedwyn, anthracite (No. 1)	6·228	¾ 1½	37·281 35·115	1 : 5·985 1 : 5·638	1 : 5·811
Yniscedwyn, anthracite (No. 2)	5·959	¾ 1½	34·430 33·646	1 : 5·778 1 : 5·646	1 : 5·712
Mr. M. Stirling's 2nd quality..	11·502	¾ 1½	55·952 53·329	1 : 4·865 1 : 4·637	1 : 4·751
Mr. M. Stirling's 3rd quality ..	10·474	¾ 1½	70·827 57·980	1 : 6·762 1 : 5·536	1 : 6·149

CHAIN CABLE.

Size and Weight per Fathom, Proof Strain, &c., &c.

Size of Chain.	Weight per Fathom.	Size of Rope.	Proof of Strain.	Weight of Anchor.	Reg. of Vessel.	Size of Chain.	Weight Per Fathom.	Size of Rope.	Proof of Strain.	Weight of Anchor.	Reg. of Vessel.
Inches.	Pounds.	In.	℔ Ton.	Cwt.	Tons.	Inches.	Pounds.	In.	℔ Ton.	Cwt.	Tons.
5/16	5½	2½	¾	...	...	1	56	10¾	17	7½	150
⅜	8	3¼	1½	...	...	1 1/16	62	11¼	19	9	180
7/16	11	4	2½	...	...	1⅛	70	12¼	21½	10½	210
½	14	4¼	3½	1½	20	1 3/16	78	12¾	24	12	240
9/16	18	5½	4½	2	30	1¼	86	13½	27	13½	280
⅝	24	6¾	6	2½	49	1 5/16	96	14¼	30	15¼	320
11/16	27	7	7½	3	50	1⅜	108	15	33	17	360
¾	30	7¾	9	3½	60	1 7/16	115	15½	36	18½	400
13/16	36	8½	11	4	75	1½	125	16	40	20	450
⅞	42	9¼	13	5	95	1⅝	145	17½	48	24	550
15/16	50	10	15	6	120	1¾	165	19	56	30	700

WIRE ROPES.

A Table showing the Circumference of Wire Ropes, their Weight per Fathom, their ultimate or Breaking Strength in Tons, and the Working Load they will bear in Cwts., as stated by Messrs. Newall & Co.

Girth in Inches.	lbs. Weight per Fathom.	Breaking Strain. Tons.	Working Load. Cwts.
1	1	2	6
1½	1½	3	9
1¾	2½	5	15
2	3½	7	21
2¼	4½	9	27
2½	5½	11	33
2¾	6½	13	39
3	7½	15	45
3¼	8½	17	51
3½	10	20	60
3¾	12	24	72
4	14	28	84
4¼	15	30	90
4⅜	16	32	96
4⅝	18	36	108

Note.—That the wire ropes as manufactured increase in their circumference by an eighth of an inch in each succeeding size of rope, but it has been thought sufficient in this Table to advance by ¼ of an inch, and to omit the intermediate sizes.

WIRES.

Tensile Strength of Single Wires of equal lengths, and thickness 0·787 of a line diameter.

	Lbs.
Iron, ...	549·25
Copper, ...	302·25
Platinum,.	278·38
Silver,......	187·18
Gold, ...	150·75
Zinc, ...	109·5
Tin,.........	34·62
Lead, ...	27·62

FLAT HEMPEN AND WIRE ROPE.

Hemp.		Wire.			
Size in Inches.	lbs. Weight per Fathom.	Size in Inches.	lbs. Weight per Fathom.	Breaking Strain—Tons.	Working Load—Cwts.
4 × 1	16½	2⅛ × ½	9	16	36
4½ × 1⅛	20	2½ × ,,	10	18	40
5 × 1¼	24	2¾ × ⅝	12½	22½	50
5½ × 1⅜	26	3 × ,,	15	27	60
6 × 1½	28	3½ × ,,	18	32	72
7 × 1⅞	36	4 × ,,	20	36	80
8¼ × 2⅛	40	4½ × ,,	22½	40	90
8½ × 2¼	45	5 × ,,	25	45	100

WROUGHT IRON TUBULAR BEAMS.

Mr. Fairbairn, by a series of highly valuable experiments on rectangular, elliptical, and cylindrical tubes, has established, that rectangular tubes are the strongest, and that elliptical ones are the next in order.

His formula for estimating the comparative strength of these tubes, whatever may be their form or relative dimensions, is the following:—$\mathrm{W} = \frac{\mathrm{A}\,d\,\mathrm{C}}{l}$

where—W = the breaking weight in tons.
A = the area of the whole cross section of the tube in square inches.
d = the depth of the tube in feet.
l = distance between the supports in feet.
C = a constant which must be determined for the particular form of the tube, and which is—
For rectangular tubes = 21·5 tons.
„ elliptical tubes... = 15·3 „ For cylindrical tubes = 13·03 tons.

To find the Breaking Weight of a Wrought Iron Tube.

Given, the area of the whole cross section of tube, the depth, the constant C, and the length between the supports.

Rule.—Multiply together the area in inches, the depth in feet, and the constact C; divide the product by the length in feet, and the quotient will be the breaking weight.

To find the Cross Sectional Area.

Given, the breaking weight, the length, the depth, and the constant C.

Rule.—Multiply the weight in tons by the length in feet, divide the product by the constant C, and divide this quotient by the depth in feet, and the quotient is the area.

Note.—In rectangular tubes, having a cellular top, the area of the top (which is exposed to compression), and the area of the bottom (which is subject to tension), should be in the ratio of 12 to 11.

[*] *Experiment on the Resistance of a Rectangular Tube to a crushing force.*

Rectangular Tube or Cell, 8 feet long, 1 foot 6 inches square, and composed of plates half an inch thick, and riveted at the corners to angle-iron.

Sectional area of the iron = 50 inches.

A pressure of 150 tons produced no alteration. With 165 tons the sides commenced giving way; with 315 tons the compression was ·025 inch; with 515 tons ·042 inch; with 665 tons ·060 inch; and with 690 tons the tube yielded by a separation of its sides.

Taking therefore 680 tons as the crushing force, we have the resistance of compression per square inch $= \frac{680}{50} = 13{\cdot}6$ tons.

Note.—The Tube was placed vertically, and subjected to the pressure under a powerful hydraulic press belonging to Messrs. B. Hick & Son, Bolton.

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[*] Mr. Fairbairn.

STRENGTH OF WROUGHT IRON PLAT

Mean breaking weight in tons per square inch, when in the direction of the fibre:—

Yorkshire plates	25·77	Mean, 22·52 tons.
Do. do.	22·76	
Derbyshire do.	21·68	
Shropshire do.	22·83	
Staffordshire do.	19·56	

Mean breaking weight in tons per square inch, when drawn across the fibre:—

Yorkshire plates,	27·49	Mean, 23·04 tons.
Do. do.	26·04	
Derbyshire do.	18·65	
Shropshire do.	20·00	
Staffordshire do.	21·01	

Mean breaking weight in lbs., from four plates of equal section, riveted by a single row of rivets.

Yorkshire	20,127	Mean, 18,590 lbs.
Derbyshire	16,107	
Shropshire	18,982	
Staffordshire	19,147	

Mean breaking weight in lbs., from four plates of equal section to the last, but united with a double row of rivets.

Yorkshire	22,699	Mean, 22,258 lbs.
Derbyshire	23,371	
Shropshire	20,159	
Staffordshire	22,902	

General Summary of Results as obtained from the Experiments of Mr. Fairbairn.

	Cohesive strength of Plates. Breaking weight in lbs. per square inch.	Strength of single-riveted Joints of equal section to the Plates, taken through the line of rivets. Breaking weight in lbs. per square inch.	Strength of double-riveted Joints of equal section to the Plates, taken through the line of rivets. Breaking weight in lbs. per square inch.
	57,724	45,743	52,352
	61,579	36,606	48,821
	58,322	43,141	58,286
	50,983	43,515	54,594
	51,130	40,249	53,879
	49,281	44,715	53,879
	43,805	37,161	
	47,062		
Mean.	52,486	41,590	53,635

The relative strengths will therefore be,—

For the plate	1000
Double-riveted joint	1021
Single-riveted joint	791

From the above, it will be seen that the single-riveted joints have lost one-fifth of the actual strength of the plates, whilst the double-riveted have retained their resisting powers unimpaired. These are important and convincing proofs of the superior value of the double joint, and in all cases where strength is required this description of joint should never be omitted.

Mr. Fairbairn, however, assumes the following relative strengths as the value of plates with their riveted joints:—

Taking the strength of the plate at	100
The strength of the double-riveted joint would then be..	70
And the strength of the single-riveted joint	56

These proportions may therefore in practice be safely taken as nearly the standard value of joints, such as used in vessels where they are required to be steam- or water-tight, and subjected to pressure varying from 10 to 100 lbs. upon the square inch.

Table exhibiting the strongest Forms and best Proportions of Riveted Joints, as deduced from Experiments and actual practice.

Thickness of Plates in inches.	Diameter of Rivets in inches.		Length of Rivets from the head in inches.		Distance of Rivets from centre to centre in inches.		Quantity of Lap in Single Joints in inches.		Quantity of Lap in Double-riveted Joints in inches.
·19 = ³⁄₁₆	·38	2·	·88	4·5	1·25	6·	1·25	6·	For the double-riveted joint, add two-thirds of the depth of the single lap.
·25 = ¼	·50		1·13		1·50		1·50		
·31 = ⁵⁄₁₆	·63		1·38		1·63	5·	1·88		
·38 = ⅜	·75		1·63		1·75		2·00	5·5	
·50 = ½	·81	1·5	2·25		2·00	4·	2·25	4·5	
·63 = ⅝	·94		2·75		2·50		2·75		
·75 = ¾	1·13		3·25		3·00		3·25		

The figures, 2·, 1·5, 4·5, 6·, 5·, &c., in the preceding Table, are multipliers for the diameter, length and distance of rivets, also for the quantity of lap allowed for the single and double joints. These multipliers may be considered as proportionals of the thickness of the plates to the diameter, length, distance of rivets, &c. For example, suppose we take three-eighth plates and required the proportionate parts of the strongest form of joint, it will be—

·375 × 2 = ·750 diameter of rivet, ¾ inch.
·375 × 4½ = 1·688 length of rivet, 1¾ inch.
·375 × 5 = 1·875 distance between rivets, 1¾ inch.
·375 × 5½ = 2·063 quantity of lap, 2 inches.
·375 × 5½ = 3·438 quantity of lap for double joints, 3½ inches.

·75, 1·68, 1·87, 2·06, and 3·43 are therefore the proportionate quantities necessary to form the strongest steam- or water-tight joints on plates three-eighths of an inch thick.

Resistance of Wrought Iron Plates to Pressure by a Blunt Instrument at right angles to the surface of the Plate.

EXPERIMENTS TO DETERMINE THE RESISTANCE PER SQUARE FOOT OF PLATES OF WROUGHT IRON TO A FORCE TENDING TO BURST THEM.

No. of Exp.	Description of Plates.	Weight laid on in lbs.	Permanent indentation of Plate.	Remarks.
			Inch.	
1.	Plate of the best Staffordshire iron ¼ in. thick.	8,617	·3	Plate not cracked.
		9,893	·35	Plate not cracked.
		11,169	·5	Crack on convex side 8 inches long.
		12,445	·6	Crack on convex side 9 inches long; not opened on concave side.
		13,789	·7	Hole through the plate about 1½ in. long, and ⅛ in. wide.
2.	Plate of the same iron and the same thickness.	9,893	·25	Double crack on convex side 1 inch long.
		11,169	·34	Double crack increased.
		12,445	·4	
		13,789	·47	
		16,477	·6	Form of crack on convex side (⅛ inch wide).
		17,821	·65	Not cracked through.
		19,769	……	Cracked through.
3.	Plate of the same iron ½ in. thick.	18,523	……	No crack.
		21,075	·33	Incipient crack on convex side.
		22,787	·45	Crack above-mentioned, 4 in. long, forming a cross.
		25,923	·60	Crack above, 6 inches long.
		29,059	·75	Crack above, ⅛ inch wide.
		32,195	·80	
		35,331	·97	
		36,899	1·10	No crack on concave side.
		37,519	……	Plate cracked through.
4.	Plate same as the last.	21,219	……	No crack.
		21,985	·35	Slight crack on convex side.
		27,708	·47	Form of crack on convex side.
		31,796	·7	Form of crack increased.
		33,431	·75	
		35,066	·83	Form of crack 4 inches deep.
		36,701	·97	Not cracked through.
		37,928	……	Cracked through.

From the above we obtain the strength of plates to resist rupture from pressure from a blunt body, or a ball 3 inches diameter.

	Lbs.	Mean.
In Experiment 1, a plate ¼th of an inch thick was burst by	13,789	16,779
In Experiment 2, a plate ¼th of an inch thick was burst by	19,769	
In Experiment 3, a plate ½ an inch thick was burst by ……	37,519	37,723
In Experiment 4, a plate ½ an inch thick was burst by ……	37,928	

Here the strengths are as the depths, a half-inch plate requiring double the weight to produce fracture that had previously burst the quarter of an inch plate. In experiments on oak timber,* the powers of resistance follow the ratio of the squares of the depth, so that a wrought-iron plate of only one-quarter of an inch thick is able to resist a force equal to that required in the rupture of a 3 inch plank.

STRENGTH OF ROLLED T IRON.

EXPERIMENTS MADE TO ASCERTAIN THE TRANSVERSE STRENGTH OF ROLLED T IRON.

The bars were supported at the ends on wooden blocks, the table uppermost, and the load applied in the centre.

1st.—Width of top table, 2 inches; thickness, ¼ inch; total depth, 2 inches; thickness of rib, ⅜ inch; clear length between bearings, 5 feet.

Weight applied in cwts. …	4	6	8	10	12	16
Deflection in inches ………	$\frac{3}{16}$	$\frac{5}{16}$	⅜	$\frac{7}{16}$	$\frac{9}{16}$	⅞

With the load of 16 cwt. the bar became permanently deflected to the extent of ¼ inch, and with 17½ cwt. bent down.

2nd.—Width of top table, 2 inches; thickness, $\frac{3}{16}$ inch; total depth, 2 inches; thickness of rib, $\frac{5}{16}$ inch; clear length between bearings, 8 feet.

Load in cwts …………	1	2	3	4	5	6	7
Deflection in inches ….	$\frac{3}{16}$	½	¾	$1\frac{1}{16}$	$1\frac{5}{16}$	2	5

With the load of 7 cwt. a permanent deflection of 2⅝ inches occurred, which increased to 15 inches, when the load became 9 cwt.

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* Taking the results of four experiments, which were on pieces from the same plank, we obtain—

	Lbs.	Mean.
Strength from planks 3 inches thick ………	18,941	17,933
Strength from planks 3 inches thick ………	16,925	
Strength from planks 1½ inch thick ………	4,532	4,406
Strength from planks 1½ inch thick ………	4,280	

Here the strength to resist rupture follows the ratio of the square of the depth, as is found to be the case in the transverse fracture of rectangular bodies of constant breadth and span.

3rd.—Width of top table, $2\frac{1}{2}$ inches; thickness, $\frac{1}{4}$ inch; total depth, $2\frac{1}{2}$ inches; thickness of rib, $\frac{1}{2}$ inch; clear length between bearings, 10 feet.

Load in cwts.	1	3	5	7	9	12	15
Deflection in inches..	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{7}{16}$	$\frac{9}{16}$	$\frac{13}{16}$	$1\frac{1}{8}$	$1\frac{7}{8}$

With the load of 15 cwt. a permanent deflection of $\frac{11}{16}$ inch was produced.

4th.—Width of top table, $2\frac{1}{2}$ inches; thickness, $\frac{1}{4}$ inch; total depth, $2\frac{1}{2}$ inches; thickness of rib, $\frac{3}{8}$ inch; clear length between bearings, 6 feet.

Load in cwts.	2	4	7	10	14	18	20	22
Deflection in inches...	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$1\frac{1}{16}$	$2\frac{3}{4}$

With the load of 22 cwt. a permanent deflection of 2 inches occurred, and with 27 cwt. the bar was broken.

5th.—Width of top table, $2\frac{1}{2}$ inches; thickness, $\frac{1}{4}$ inch; total depth, $2\frac{1}{2}$ inches; thickness of rib, $\frac{3}{8}$ inch, being same section as last; clear length between bearings, 10 feet.

Load in cwts.	1	2	4	6	8	10	11
Deflection in inches ...	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{5}{8}$	1	$1\frac{5}{8}$	$2\frac{3}{4}$	$4\frac{1}{4}$

With the load of 11 cwt. a permanent deflection of $2\frac{1}{2}$ inches was produced, and with 14 cwt. the bar failed by bending sideways.

6th.—Width of top table, 3 inches; thickness, $\frac{3}{8}$ inch; total depth, 3 inches; thickness of rib, $\frac{1}{2}$ inch; clear length between bearings, 10 feet.

Load in cwts.	5	8	11	14	17	20	22
Deflection in inches..	$\frac{3}{8}$	$\frac{9}{16}$	$\frac{3}{4}$	1	$1\frac{3}{16}$	$1\frac{5}{8}$	3

Bar broken with 24 cwt.

WROUGHT IRON BEAM, FLANGED TOP AND BOTTOM.

Beam of wrought iron composed of a uniform vertical rib, (7 inches deep and 7 feet 6 inches long) with two 2-inch angle-irons riveted to both top and bottom of the rib; rivets, 4 inches asunder; weight of beam, $161\frac{1}{2}$ lbs.; distance between the supports, 7 feet.

Dimensions of Section.—Vertical rib, 7 inches deep by $\frac{1}{4}$ inch thick; breadth across top flange, 4·25 inches; mean thickness of top flange, ·28 inch; breadth across bottom flange, 4·25 inches; mean thickness of bottom flange, ·30 inch.

Load in cwts.	$3\frac{3}{4}$	$7\frac{1}{2}$	147	166	200
Deflection in inches	·10	·18	·25	·36	·52

With the weight of 24,379 lbs. the beam sunk, the top flanges having become twisted.

WEIGHT OF MATERIALS.

TABLE OF WEIGHTS OF VARIOUS BODIES.

Names of Bodies.	No. of Cubic Feet in one Ton.	Weight of a Cubic Foot.	Weight of a Cubic Inch.	No. of Cubic Inches in a Pound.	Multipliers.
	Feet.	Lbs.	Oz.	Ins.	
Copper, cast	4·078	549·25	5·086	3·146	·3178
Copper, sheet	4·020	557·18	5·159	3·103	·3225
Brass, cast	4·270	524·75	4·852	3·293	·3037
Iron, cast	4·977	450·00	4·203	3·802	·263
Iron, bar	4·716	475·00	4·410	3·623	·276
Lead	3·155	710·00	6·456	2·437	·4103
Steel, soft	4·573	489·56	4·527	3·530	·2833
Steel, hard	4·583	488·50	4·517	3·537	·2827
Zinc, cast	5·102	439·00	4·156	3·845	·26
Tin, cast	4·915	455·75	4·215	3·790	·2636
Bismuth	3·615	619·50	5·710	2·789	·3585
Gun metal	4·392	510·00	5·0775	3·147	·3177
Sand	23·60	95·00	·8785	18·190	·055
Coal	28·41	78·12	·7225	22·120	·0452
Brick	17·92	125·00	1·156	13·824	·0723
Stone, paving	14·83	151·00	1·396	11·443	·0873
Slate	13·41	167·00	1·544	10·347	·0967
Marble	13·07	171·37	1·585	10·083	·0991
White Lead	11·34	197·50	1·826	8·750	·1143
Glass	12·44	180·00	1·664	9·600	·1042
Tallow	37·92	59·06	·5462	29·258	·0342
Cork	149·33	15·00	·138	115·200	·0087
Larch	65·88	34·00	·315	50·823	·0197
Elm	64·00	35·00	·321	49·726	·0201
Pine, pitch	54·63	41·00	·382	41·890	·024
Beech	51·00	44·00	·403	39·724	·0252
Teak	47·66	47·00	·431	37·113	·027
Ash	46·66	48·00	·440	36·370	·0275
Mahogany	42·00	53·25	·493	32·449	·0308
Oak, English	38·62	58·00	·561	28·505	·0351
Oil of Turpentine	41·20	54·37	·503	31·771	·0315
Olive Oil	39·17	57·18	·529	30·220	·0331
Linseed Oil	38·45	58·25	·539	29·665	·0337
Spirits, proof	38·66	57·93	·536	29·828	·03352
Water, distilled	35·84	62·50	·578	27·648	·03617
Water, sea	34·86	64·25	·594	26·894	·0372
Tar	35·31	63·43	·587	27·242	·0367
Vinegar	34·93	64·12	·593	26·949	·037
Mercury	2·641	848·00	7·851	2·037	·4908

Note.—To find the weight of any of the above bodies, the cubic inches being given, multiply the given cubic inches by the multiplier in the fifth column, and you have the weight in lbs.

MALLEABLE BAR IRON.—*Weight of a Lineal Foot.*

Square Rolled Bars.		Round Rolled Bars.	
Scant.	Weight.	Diameter	Weight.
Inches.	Pounds.	Inches.	Pounds.
1/4	·208	1/4	·163
5/16	·325	5/16	·255
3/8	·468	3/8	·368
7/16	·638	7/16	·501
1/2	·833	1/2	·654
9/16	1·05	9/16	·828
5/8	1·30	5/8	1·02
11/16	1·57	11/16	1·23
3/4	1·87	3/4	1·47
13/16	2·20	13/16	1·72
7/8	2·55	7/8	2·
15/16	2·92	15/16	2·30
1	3·33	1	2·61
1 1/16	3·76	1 1/16	2·95
1 1/8	4·21	1 1/8	3·31
1 3/16	4·70	1 3/16	3·69
1 1/4	5·20	1 1/4	4·09
1 5/16	5·74	1 5/16	4·51
1 3/8	6·30	1 3/8	4·95
1 7/16	6·88	1 7/16	5·40
1 1/2	7·50	1 1/2	5·89
1 9/16	8·15	1 9/16	6·40
1 5/8	8·80	1 5/8	6·91
1 11/16	9·50	1 11/16	7·46
1 3/4	10·20	1 3/4	8·01
1 13/16	10·69	1 13/16	8·60
1 7/8	11·71	1 7/8	9·20
1 15/16	12·52	1 15/16	9·83
2	13·33	2	10·47
2 1/8	15·05	2 1/8	11·82
2 1/4	16·87	2 1/4	13·25
2 3/8	18·80	2 3/8	14·76
2 1/2	20·80	2 1/2	16·36
2 5/8	22·96	2 5/8	18·03
2 3/4	25·20	2 3/4	19·79
2 7/8	27·55	2 7/8	21·63
3	30·	3	23·56
3 1/8	32·55	3 1/8	25·56
3 1/4	35·20	3 1/4	27·65
3 3/8	37·96	3 3/8	29·82
3 1/2	40·80	3 1/2	32·07
3 5/8	43·80	3 5/8	34·40
3 3/4	46·87	3 3/4	36·81
3 7/8	50·05	3 7/8	39·31
4	53·33	4	41·88
4 1/8	56·71	4 1/8	44·54
4 1/4	60·20	4 1/4	47·28
4 3/8	63·80	4 3/8	50·11
4 1/2	67·50	4 1/2	53·01
4 5/8	71·30	4 5/8	56·
4 3/4	75·20	4 3/4	59·06
4 7/8	79·21	4 7/8	62·21
5	83·33	5	65·45

Square Ham. Bars.		Round Ham. Bars.	
Scant.	Weight.	Diam.	Weight.
Inches.	Pounds.	Inches.	Pounds.
5	84·03	5	66·
5 1/8	88·28	5 1/8	69·34
5 1/4	92·64	5 1/4	72·76
5 3/8	97·11	5 3/8	76·26
5 1/2	101·68	5 1/2	79·85
5 5/8	106·35	5 5/8	83·52
5 3/4	111·13	5 3/4	87·28
5 7/8	116·01	5 7/8	91·11
6	121·	6	95·03
6 1/8	126·10	6 1/8	99·03
6 1/4	131·30	6 1/4	103·12
6 3/8	136·60	6 3/8	107·29
6 1/2	142·01	6 1/2	111·53
6 5/8	147·53	6 5/8	115·86
6 3/4	153·15	6 3/4	120·28
6 7/8	158·87	6 7/8	124·77
7	164·70	7	129·35
7 1/8	170·64	7 1/8	134·02
7 1/4	176·68	7 1/4	138·76
7 3/8	182·82	7 3/8	143·59
7 1/2	189·07	7 1/2	148·49
7 5/8	195·43	7 5/8	153·48
7 3/4	201·89	7 3/4	158·56
7 7/8	208·45	7 7/8	163·72
8	215·12	8	168·95
8 1/8	221·90	8 1/8	174·27
8 1/4	228·78	8 1/4	179·68
8 3/8	235·76	8 3/8	185·17
8 1/2	242·85	8 1/2	190·73
8 5/8	250·05	8 5/8	196·39
8 3/4	257·35	8 3/4	202·12
8 7/8	264·75	8 7/8	207·93
9	272·26	9	213·83
9 1/8	279·88	9 1/8	219·81
9 1/4	287·60	9 1/4	225·88
9 3/8	295·73	9 3/8	232·03
9 1/2	303·36	9 1/2	238·25
9 5/8	311·39	9 5/8	244·56
9 3/4	319·53	9 3/4	250·96
9 7/8	327·78	9 7/8	257·43
10	336·13	10	264·
10 1/8	344·59	10 1/8	270·63
10 1/4	353·15	10 1/4	277·36
10 3/8	361·81	10 3/8	284·16
10 1/2	370·58	10 1/2	291·05
10 5/8	379·46	10 5/8	298·03
10 3/4	388·44	10 3/4	305·08
10 7/8	397·53	10 7/8	312·21
11	406·72	11	319·43
11 1/8	416·01	11 1/8	326·73
11 1/4	425·42	11 1/4	334·12
11 3/8	434·92	11 3/8	341·58
11 1/2	444·58	11 1/2	349·10
11 5/8	454·25	11 5/8	356·73
11 3/4	464·07	11 3/4	364·47
11 7/8	474·	11 7/8	372·26
12	484·03	12	380·13

FLAT ROLLED IRON.—*Weight of a Lineal Foot.*

Width of Iron.	Thick, 1-4th in.	Thick, 5-16ths in.	Thick, 3-8ths in.	Thick, 7-16ths in.	Thick, ½ in.	Thick, 9-16ths in.	Thick, 5-8ths in.	Thick, 11-16ths in.	Thick, 3-4ths in.	Thick, 13-16ths in.	Thick, 7-8ths in.	Thick, 15-16ths in.	Thick, 1 in.
Inches.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
1	·833	1·04	1·25	1·45	1·66	1·87	2·08	2·29	2·50	2·70	2·91	3·12	3·33
1⅛	·937	1·17	1·40	1·64	1·87	2·10	2·34	2·57	2·81	3·04	3·28	3·51	3·75
1¼	1·04	1·30	1·56	1·82	2·08	2·34	2·60	2·86	3·12	3·38	3·64	3·90	4·16
1⅜	1·14	1·43	1·71	2·	2·29	2·57	2·86	3·15	3·43	3·72	4·01	4·29	4·58
1½	1.25	1·56	1·87	2·18	2·50	2·81	3·12	3·43	3·75	4·06	4·37	4·68	5·
1⅝	1.35	1·69	2·03	2·36	2·70	3·04	3·38	3·72	4·06	4·40	4·73	5·07	5·41
1¾	1·45	1·82	2·18	2·55	2·91	3·28	3·64	4·01	4·37	4·73	5·10	5·46	5·83
1⅞	1·56	1·95	2·34	2·73	3·12	3·51	3·90	4·29	4·68	5·07	5·46	5·85	6·25
2	1.66	2·08	2·50	2·91	3·33	3·75	4·16	4·58	5·	5·41	5·83	6·25	6·66
2⅛	1·77	2·21	2·65	3·09	3·54	3·98	4·42	4·86	5·31	5·75	6·19	6·64	7·08
2¼	1·87	2·34	2·81	3·28	3·75	4·21	4·68	5·15	5·62	6·09	6·56	7·03	7·50
2⅜	1·97	2·47	2·96	3·46	3·95	4·45	4·94	5·44	5·93	6·43	6·92	7·42	7·91
2½	2·08	2·60	3·12	3·64	4·16	4·68	5·20	5·72	6·25	6·77	7·29	7·81	8·33
2⅝	2·18	2·73	3·28	3·82	4·37	4·92	5·46	6·01	6·56	7·10	7·65	8·20	8·75
2¾	2·29	2·86	3·43	4·01	4·58	5·15	5·72	6·30	6·87	7·44	8·02	8·59	9·16
2⅞	2·39	2·99	3·59	4·19	4·79	5·39	5·98	6·58	7·18	7·78	8·38	8·98	9·58
3	2·50	3·12	3·75	4·37	5·	5·62	6·25	6·87	7·50	8·12	8·75	9·37	10·
3¼	2·70	3·38	4·06	4·73	5·41	6·09	6·77	7·44	8·12	8·80	9·47	10·15	10·83
3½	2·91	3·64	4·37	5·10	5·83	6·56	7·29	8·02	8·75	9·47	10·20	10·93	11·66
3¾	3·12	3·90	4·68	5·46	6·25	7·03	7·81	8·59	9·37	10·15	10·93	11·71	12·50
4	3·33	4·16	5·	5·83	6·66	7·50	8·33	9·16	10·	10·83	11·66	12·50	13·33
4¼	3·54	4·42	5·31	6·19	7·08	7·96	8·85	9·73	10·62	11·51	12·39	13·28	14·16
4½	3·75	4·68	5·62	6·56	7·50	8·43	9·37	10·31	11·25	12·18	13·12	14·06	15·
4¾	3·95	4·94	5·93	6·92	7·91	8·90	9·89	10·88	12·87	12·86	13·85	14·84	15·83
5	4·17	5·20	6·25	7·29	8·33	9·37	10·41	11·45	12·50	13·54	14·58	15·62	16·66
5¼	4·37	5·46	6·56	7·65	8·75	9·84	10·93	12·03	13·12	14·21	15·31	16·40	17·50
5½	4·58	5·72	6·87	8·02	9·16	10·31	11·45	12·60	13·75	14·89	16·04	17·18	18·33
5¾	4·79	5·98	7·18	8·38	9·58	10·78	11·97	13·17	14·37	15·57	16·77	17·96	19·16
6	5·	6·26	7·50	8·75	10·	11·25	12·50	13·75	15·	16·25	17·50	18·75	20·

FLAT HAMMERED IRON.—*Weight of a Lineal Foot.*

Thickness.	⅝ In.	¾ In.	⅞ In.	1 In.	Thickness.	⅝ In.	¾ In.	⅞ In.	1 In.
Width.	lbs. Weight.	lbs. Weight.	lbs. Weight.	lbs. Weight.	Width.	lbs. Weight.	lbs. Weight.	lbs. Weight.	lbs. Weight.
2½ In.	5·25	6·3	7·35	8·4	4½ In.	9·45	11·34	13·23	15·12
2¾	5·77	6·93	8·08	9·24	4¾	9·98	11·97	13·97	15·96
3	6·3	7·56	8·82	10·08	5	10·5	12·6	14·7	16·8
3¼	6·82	8·19	9·56	10·92	5¼	11·03	13·23	15·44	17·64
3½	7·35	8·82	10·29	11·76	5½	11·55	13·86	16·17	18·48
3¾	7·87	9·45	11·02	12·6	5¾	12·08	14·49	16·91	19·32
4	8·4	10·08	11·76	13·44	6	12·6	15·12	17·64	20·16
4¼	8·92	10·71	12·5	14·28					

HOOP IRON.

WEIGHT OF A TEN FEET LENGTH OF HOOP IRON, AND ITS THICKNESS ON THE WIRE GUAGE.

Width of Iron.	Thick. No. 6.	Thick. No. 7.	Thick. No. 8.	Thick. No. 9.	Thick. No. 10.	Thick. No. 11.	Thick. No. 12.	Thick. No. 13.	Thick. No. 14.	Thick. No. 15.	Thick. No. 16.	Thick. No. 17.	Thick. No. 18.
Inches.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
¾	5·07	4·68	4·28	3·90	3·51	3·12	2·73	2·34	1·95	1·76	1·56	1·36	1·16
⅞	5·90	5·45	4·97	4·55	4·07	3·62	3·17	2·70	2·27	2·05	1·80	1·57	1·35
1	6·76	6·25	5·71	5·20	4·68	4·16	3·65	3·12	2·60	2·35	2·08	1·81	1·55
1⅛	7·60	7·02	6·42	5·85	5·26	4·68	4·10	3·51	2·92	2·62	2·34	2·04	1·75
1¼	8·45	7·81	7·14	6·50	5·85	5·21	4·56	3·90	3·25	2·93	2·60	2·27	1·93
1⅜	9·30	8·59	7·60	7·15	6·43	5·73	5·01	4·29	3·57	3·23	2·86	2·49	2·13
1½	10·15	9·37	8·57	7·80	7·02	6·25	5·47	4·68	3·90	3·52	3·12	2·72	2·32
1⅝	10·95	10·15	9·25	8·45	7·55	6·75	5·90	5·05	4·20	3·80	3·35	2·90	2·50
1¾	11·80	10·90	9·95	9·10	8·15	7·25	6·35	5·40	4·55	4·10	3·60	3·15	2·70
1⅞	12·65	11·65	10·65	9·75	8·75	7·75	6·80	5·80	4·85	4·35	3·85	3·35	2·90
2	13·53	12·50	11·43	10·40	9·36	8·33	7·30	6·25	5·20	4·70	4·16	3·63	3·10
2⅛	14·37	13·27	12·14	11·05	9·95	8·85	7·75	6·64	5·52	4·97	4·42	3·85	3·30
2¼	15·21	14·05	12·85	11·70	10·53	9·37	8·20	7·03	5·85	5·25	4·68	4·08	3·50
2⅜	16·07	14·84	13·32	12·35	11·11	9·89	8·66	7·42	6·17	5·58	4·94	4·31	3·68
2½	16·90	15·62	14·28	13·	11·71	10·42	9·12	7·81	6·50	5·87	5·20	4·54	3·87
2⅝	17·75	16·40	14·75	13·65	12·28	10·93	9·68	8·19	6·82	6·15	5·45	4·75	4·05
2¾	18·61	17·18	15·21	14·30	12·87	11·46	10·03	8·59	7·15	6·46	5·72	4·99	4·26
2⅞	19·45	17·96	16·18	14·95	13·46	11·98	10·49	8·98	7·47	6·75	5·98	5·22	4·45
3	20·30	18·75	17·15	15·60	14·05	12·50	10·95	9·37	7·80	7·05	6·25	5·45	4·65
3¼	21·90	20·30	18·50	16·90	15·10	13·50	11·80	10·10	8·40	7·60	6·70	5·80	5·
3½	23·60	21·80	19·90	18·20	16·30	14·50	12·70	10·80	9·10	8·20	7·20	6·30	5·40
3¾	25·30	23·30	21·30	19·50	17·50	15·50	13·60	11·60	9·70	8·70	7·70	6·70	5·80
4	27·07	25·	22·86	20·80	18·73	16·67	14·60	12·50	10·40	9·40	8·33	7·26	6·20
4¼	28·75	26·55	24·28	22·10	19·90	17·70	15·50	13·28	11·05	9·95	8·84	7·70	6·60
4½	30·43	28·10	25·71	23·40	21·07	18·75	16·40	14·06	11·70	10·50	9·36	8·17	7·
4¾	32·14	29·68	26·64	24·70	22·23	19·79	17·33	14·84	12·35	11·16	9·88	8·62	7·36
5	33·80	31·25	28·57	26·	23·42	20·84	18·25	15·63	13·	11·75	10·41	9·08	7·75
5¼	35·50	32·81	29·50	27·30	24·56	21·86	19·16	16·38	13·65	12·31	10·91	9·61	8·11
5½	37·22	34·37	30·43	28·60	25·75	22·92	20·07	17·18	14·30	12·92	11·45	9·98	8·22
5¾	38·91	35·93	32·36	29·90	26·92	23·96	20·98	17·96	14·95	13·51	11·97	10·44	8·91
6	40·60	37·50	34·30	31·20	28·10	25·	21·90	18·75	15·60	14·10	12·50	10·90	9·30

Hoop Iron ⅜ broad, No. 21, ·685 lbs.
Do. ½ do. No. 20, ·885 lbs. } per 10 feet length.
Do. ⅝ do. No. 19, 1·24 lbs.

SHEET MALLEABLE IRON, BRASS, COPPER, AND LEAD.—*Weight of a Superficial Foot in Pounds Avoirdupois.*

NAMES.	THICKNESS IN PARTS OF AN INCH.											
	$\frac{1}{16}$	$\frac{1}{8}$	$\frac{3}{16}$	$\frac{1}{4}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1 in.
Iron in lbs.	2·5	5·	7·5	10·	12·5	15·	17·5	20·	25·	30·	35·	40·
Brass in lbs. ...	2·7	5·5	8·2	10·9	13·6	16·3	19·	21·8	27·1	32·5	37·9	43·3
Copper in lbs....	2·9	5·8	8·7	11·6	14·5	17·4	20·3	23·2	28·9	34·7	40·4	46·2
Lead in lbs. ...	3·7	7·4	11·1	14·8	18·5	22·2	25·9	29·6	37·	44·4	57·8	59·2

NAMES.	THICKNESS BY THE BIRMINGHAM WIRE GAUGE.													
	0000	000	00	0	1	2	3	4	5	6	7	8	9	10
Iron in lbs. .	18·99	17·78	15·89	14·22	12·5	12·	11·	10·	8·74	8·12	7·5	6·86	6·24	5·62
Brass in lbs.	21·11	19·76	17·67	15·81	13·75	13·2	12·1	11·	9·61	8·93	8·25	7·54	6·86	6·18
Copper in lbs	21·61	20·53	18·87	16·43	14·5	13·9	12·75	11·6	10·1	9·4	8·7	7·9	7·2	6·5

NAMES.	THICKNESS BY THE WIRE GAUGE.													
	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Iron in lbs. .	5·	4·38	3·75	3·12	2·82	2·5	2·18	1·86	1·7	1·54	1·4	1·25	1·12	1·
Brass in lbs.	5·5	4·81	4·12	3·43	3·1	2·75	2·4	2·04	1·87	1·69	1·54	1·37	1·23	1·1
Copper in lbs	5·8	5·08	4·34	3·6	3·27	2·9	2·52	2·15	1·97	1·78	1·62	1·45	1·3	1·16

NAMES.	THICKNESS BY THE WIRE GAUGE.													
	25	26	27	28	29	30	31	32	33	34	35	36		
Iron in lbs. .	·9	·8	·72	·64	·56	·5	·42	·38	·34	·29	·21	·17		
Brass in lbs	·99	·88	·79	·7	·616	·55	·46	·41	·37	·32	·24	·18		
Copper in lbs	1·04	·927	·835	·74	·649	·58	·48	·44	·39	·33	·26	·19		

HEADS AND NUTS FOR BOLTS.—*Proportional Sizes and Weights.*

Diameter of Bolt.	Breadth of head & nut over sides.	Breadth of head & nut over angles.	Thickness of head.	Thickness of nut.	Weight of Hexagon head and nut,	Weight of Square head and nut,	Weight of Rose head and nut,
					Will equal that of rod iron of the same diameter as the bolt, and of following lengths.		
Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
$\frac{1}{4}$	$\frac{11}{16}$	$\frac{3}{4}$	$\frac{7}{32}$	$\frac{5}{16}$	$1\frac{1}{4}$	$1\frac{1}{2}$	1
$\frac{3}{8}$	$\frac{13}{16}$	$\frac{15}{16}$	$\frac{5}{16}$	$\frac{7}{16}$	$1\frac{7}{8}$	$2\frac{1}{4}$	$1\frac{1}{2}$
$\frac{1}{2}$	1	$1\frac{1}{8}$	$\frac{7}{16}$	$\frac{9}{16}$	$2\frac{1}{2}$	3	2
$\frac{5}{8}$	$1\frac{3}{16}$	$1\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$3\frac{1}{8}$	$3\frac{3}{4}$	$2\frac{1}{2}$
$\frac{3}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$\frac{5}{8}$	$\frac{7}{8}$	$3\frac{3}{4}$	$4\frac{1}{2}$	3
$\frac{7}{8}$	$1\frac{9}{16}$	$1\frac{13}{16}$	$\frac{11}{16}$	1	$4\frac{3}{8}$	$5\frac{1}{4}$	$3\frac{1}{2}$
1	$1\frac{3}{4}$	2	$\frac{3}{4}$	$1\frac{1}{8}$	5	6	4
$1\frac{1}{8}$	$1\frac{15}{16}$	$2\frac{1}{4}$	$\frac{13}{16}$	$1\frac{1}{4}$	$5\frac{5}{8}$	$6\frac{3}{4}$	$4\frac{1}{2}$
$1\frac{1}{4}$	$2\frac{1}{8}$	$2\frac{7}{16}$	$\frac{7}{8}$	$1\frac{7}{16}$	$6\frac{1}{4}$	$7\frac{1}{2}$	5
$1\frac{3}{8}$	$2\frac{5}{16}$	$2\frac{11}{16}$	1	$1\frac{9}{16}$	$6\frac{7}{8}$	$8\frac{1}{4}$	$5\frac{1}{2}$
$1\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{11}{16}$	$7\frac{1}{2}$	9	6
$1\frac{5}{8}$	$2\frac{11}{16}$	$3\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{13}{16}$	$8\frac{1}{8}$	$9\frac{3}{4}$	$6\frac{1}{2}$
$1\frac{3}{4}$	$2\frac{7}{8}$	$3\frac{5}{16}$	$1\frac{3}{8}$	2	$8\frac{3}{4}$	$10\frac{1}{2}$	7
$1\frac{7}{8}$	$3\frac{1}{16}$	$3\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{8}$	$9\frac{3}{8}$	$11\frac{1}{4}$	$7\frac{1}{2}$
2	$3\frac{1}{4}$	$3\frac{3}{4}$	$1\frac{5}{8}$	$2\frac{1}{4}$	10	12	8
$2\frac{1}{4}$	$3\frac{5}{8}$	$4\frac{3}{16}$	$1\frac{11}{16}$	$2\frac{1}{2}$	$11\frac{1}{4}$	$13\frac{1}{2}$	9
$2\frac{1}{2}$	4	$4\frac{5}{8}$	$1\frac{3}{4}$	$2\frac{3}{4}$	$12\frac{1}{2}$	15	10

CAST IRON.—*Weight of a Lineal Foot of Square and Round.*

SQUARE.				ROUND.			
Thick.	Weight.	Thick.	Weight.	Thick.	Weight.	Thick.	Weight.
Inches Square.	Pounds.	Inches Square	Pounds.	Inches Diam.	Pounds.	Inches Diam.	Pounds.
½	·78	5	78·12	½	·61	5	61·35
⅝	1·22	5⅛	82·08	⅝	·95	5⅛	64·46
¾	1·75	5¼	86·13	¾	1·38	5¼	67·64
⅞	2·39	5⅜	90·28	⅞	1·87	5⅜	70·09
1	3·12	5½	94·53	1	2·45	5½	74·24
1⅛	3·95	5⅝	98·87	1⅛	3·10	5⅝	77·65
1¼	4·88	5¾	103·32	1¼	3·83	5¾	81·14
1⅜	5·90	5⅞	107·86	1⅜	4·64	5⅞	84·71
1½	7·03	6	112·50	1½	5·52	6	88·35
1⅝	8·25	6¼	122·08	1⅝	6·48	6¼	95·87
1¾	9·57	6½	132·03	1¾	7·51	6½	103·69
1⅞	10·98	6¾	142·38	1⅞	8·62	6¾	111·82
2	12·50	7	153·12	2	9·81	7	120·26
2⅛	14·11	7¼	164·25	2⅛	11·08	7¼	129·
2¼	15·81	7½	175·78	2¼	12·42	7½	138·05
2⅜	17·62	7¾	187·68	2⅜	13·84	7¾	147·41
2½	19·53	8	200·	2½	15·33	8	157·08
2⅝	21·53	8¼	212·56	2⅝	16·91	8¼	167·05
2¾	23·63	8½	225·78	2¾	18·56	8½	177·10
2⅞	25·83	8¾	239·25	2⅞	20·28	8¾	187·91
3	28·12	9	253·12	3	22·08	9	198·79
3⅛	30·51	9¼	267·38	3⅛	23·96	9¼	210·
3¼	33·	9½	282·	3¼	25·92	9½	221·50
3⅜	35·59	9¾	297·07	3⅜	27·95	9¾	233·31
3½	38·28	10	312·50	3½	30·06	10	245·43
3⅝	41·06	10¼	328·32	3⅝	32·25	10¼	257·86
3¾	43·94	10½	344·53	3¾	34·51	10½	270·59
3⅞	46·92	10¾	361·13	3⅞	36·85	10¾	283·63
4	50·	11	378·12	4	39·27	11	296·97
4⅛	53·14	11¼	395·50	4⅛	41·76	11¼	310·63
4¼	56·44	11½	413·28	4¼	44·27	11½	324·59
4⅜	59·81	11¾	431·44	4⅜	46·97	11¾	338·85
4½	63·28	12	450·	4½	49·70	12	353·43
4⅝	66·84			4⅝	52·50		
4¾	70·50			4¾	55·37		
4⅞	74·26			4⅞	58·32		

NOTE.—The weight of malleable bar iron being 1:—
The weight of cast iron = ·95
Ditto steel = 1·02
Ditto copper = 1·16
Ditto brass = 1·09
Ditto lead = 1·48

The weight of cast iron being 1 :—
The weight of malleable bar iron......... = 1·07
The weight of steel = 1·08
Ditto brass = 1·16
Ditto copper = 1·21
Ditto lead = 1·56

The weight of dry deal or yellow pine being 1 :—
The weight of cast iron = 11·
Ditto brass = 12·7
The weight of copper = 13·3
Ditto lead = 17·1

CAST IRON.—*Weight of a Lineal Foot of Flat.*

Width of Iron.	Thick, 1-4th in.	Thick, 3-8ths in.	Thick, ½ in.	Thick, 5-8ths in.	Thick, 3-4ths in.	Thick, 7-8ths in.	Thick, 1 in.
Inches.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
2	1·56	2·34	3·12	3·90	4·68	5·46	6·25
2¼	1·75	2·63	3·51	4·39	5·27	6·15	7·03
2½	1·95	2·92	3·90	4·88	5·85	6·83	7·81
2¾	2·14	3·22	4·29	5·37	6·44	7·51	8·59
3	2·34	3·51	4·68	5·85	7·03	8·20	9·37
3¼	2·53	3·80	5·07	6·34	7·61	8·88	10·15
3½	2·73	4·10	5·46	6·83	8·20	9·57	10·93
3¾	2·93	4·39	5·85	7·32	8·78	10·25	11·71
4	3·12	4·68	6·25	7·81	9·37	10·93	12·50
4¼	3·32	4·97	6·64	8·30	9·96	11·62	13·28
4½	3·51	5·27	7·03	8·78	10·54	12·30	14·06
4¾	3·71	5·56	7·42	9·27	11·13	12·98	14·84
5	3·90	5·86	7·81	9·76	11·71	13·67	15·62
5¼	4·10	6·15	8·20	10·25	12·30	14·35	16·40
5½	4·29	6·44	8·59	10·74	12·89	15·03	17·18
5¾	4·49	6·73	8·98	11·23	13·46	15·72	17·96
6	4·68	7·03	9·37	11·71	14·06	16·40	18·75

CAST IRON.—*Weight of a Superficial Foot, from ¼ to 2 Inches Thick.*

Thick.	Weight.	Thick.	Weight.	Thick.	Weight.	Thick.	Weight.
Inch.	Pounds.	Inch.	Pounds.	Inch.	Pounds.	Inch.	Pounds.
¼	9·37	¾	28·12	1¼	46·87	1¾	65·62
⅜	14·06	⅞	32·81	1⅜	51·56	1⅞	70·31
½	18·75	1	37·50	1½	56·25	2	75·
⅝	23·43	1⅛	42·18	1⅝	60·93		

BALLS:—CAST IRON, BRASS, COPPER, AND LEAD.—*Weight from 1 Inch to 12 Inches Diameter.*

Diameter.	Cast Iron.	Brass.	Copper.	Lead.	Diameter.	Cast Iron.	Brass.	Copper.	Lead.
Inches.	Lbs.	Lbs.	Lbs.	Lbs.	Inches.	Lbs.	Lbs.	Lbs.	Lbs.
1	·136	·158	·166	·214	7	46·76	54·5	57·1	73·7
1½	·46	·537	·56	·727	7½	57·52	67·11	70·0	90·00
2	1·09	1·25	1·3	1·7	8	69·81	81·4	85·2	110·1
2½	2·13	2·50	2·60	3·35	8½	83·73	100·0	102·3	132·3
3	3·68	4·3	4·5	5·8	9	99·4	115·9	121·3	156·7
3½	5·84	6·82	7·14	9·23	9½	116·9	136·4	143·0	184·7
4	8·72	10·2	10·7	13·8	10	136·35	159·0	166·4	215·0
4½	12·42	14·5	15·25	19·6	10½	157·84	184·0	193·0	250·0
5	17·04	19·9	20·8	26·9	11	181·48	211·8	221·8	286·7
5½	22·68	26·47	27·74	36·0	11½	207·37	242·0	253·5	327·7
6	29·45	34·3	35·9	46·4	12	235·62	275·0	288·1	372·3
6½	37·44	43·67	45·76	59·13					

CAST IRON PIPES.—*Weight per Lineal Foot.*

Dia. of Bore.	¼ Inch Thick.	⅜ Inch Thick.	½ Inch Thick.	⅝ Inch Thick.	¾ Inch Thick.	⅞ Inch Thick.	1 Inch Thick.	1⅛ Inch Thick.	1¼ Inch Thick.
In.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1	3·06	5·06	7·36	9·97	12·89	16·11	19·63		
1¼	3·68	5·98	8·59	11·51	14·73	18·25	22·09		
1½	4·29	6·9	9·82	13·04	16·56	20·4	24·54	28·99	33·74
1¾	4·91	7·83	11·05	14·57	18·41	22·55	27·	31·75	36·76
2	5·53	8·75	12·25	16·11	20·25	24·7	29·45	34·46	40·
2¼	6·14	9·66	13·5	17·64	22·09	26·84	31·85	37·28	42·95
2½	6·74	10·58	14·72	19·17	23·92	28·93	34·36	40·03	46·02
2¾	7·36	11·5	15·95	20·7	25·71	31·14	36·81	42·8	49·08
3	7·98	12·43	17·18	22·19	27·62	33·29	39·25	45·56	52·20
3¼	8·59	13·34	18·35	23·78	29·45	35·44	41·72	48·32	55·22
3½	9·2	14·21	19·64	25·31	31·3	37·58	44·18	51·08	58·29
3¾	9·76	15·19	20·86	26·85	33·13	39·73	46·63	53·84	61·36
4	10·44	16·11	22·1	28·38	34·98	41·88	49·00	56·61	64·25
4¼	11·1	17·08	23·37	29·97	36·87	44·08	51·6	59·42	67·45
4½	11·66	17·94	24·54	31·44	38·65	46·17	53·99	62·12	70·56
4¾	12·27	18·87	25·77	32·98	40·5	48·32	56·45	64·89	73·63
5	12·88	19·78	27·	34·51	42·25	50·46	58·9	67·64	76·25
5¼	13·5	20·71	28·23	36·05	44·18	52·62	61·36	70·41	79·77
5½	14·11	21·63	29·45	37·58	46·02	54·76	63·81	73·17	82·84
5¾	14·73	22·55	30·68	39·12	47·86	56·91	66·27	75·94	85·91
6	15·34	23·47	31·90	40·65	49·50	59·06	68·50	78·7	89·0
6¼	15·95	24·39	33·13	42·18	51·54	61·21	71·18	81·23	92·04
6½	16·47	25·31	34·36	43·72	53·39	63·36	73·41	84·22	95·1
6¾	17·18	26·23	35·59	45·26	55·23	65·28	76·09	86·97	98·18
7	17·79	27·15	36·80	46·79	56·84	67·65	78·50	89·74	101·25
7¼	18·41	28·08	38·05	48·1	58·91	69·79	81·	92·5	104·31
7½	19·03	29·	39·05	49·86	60·74	71·95	83·45	95·26	107·38
7¾	19·64	29·69	40·5	51·38	62·59	74·09	85·9	98·02	110·45
8	20·02	30·83	41·70	52·92	64·42	76·23	88·25	100·78	114·
8¼	20·86	31·74	42·95	54·45	66·26	78·38	90·81	103·54	116·58
8½	21·69	32·9	44·4	56·21	68·33	80·76	93·49	106·53	119·87
8¾	22·09	33·59	45·4	57·52	69·95	82·68	95·72	109·06	122·72
9	22·71	34·52	46·50	59·07	71·50	84·84	98·50	111·84	126·0
9¼	23·31	35·43	47·86	60·59	73·63	86·97	100·63	114·59	128·85
9½	23·93	36·36	49·09	62·13	75·47	89·13	103·09	117·35	131·93
9¾	24·55	37·28	50·32	63·66	77·32	91·28	105·54	120·12	134·99
10	25·16	38·2	51·50	65·2	79·16	93·42	108·	122·87	138·00
10¼	25·77	39·11	52·77	66·73	80·99	95·57	110·44	125·63	141·12
10½	26·38	40·04	54·	68·26	82·84	97·71	112·9	128·39	144·19
10¾	27·	40·96	55·22	69·8	84·67	99·86	115·35	131·15	147·26
11	27·62	41·88	56·25	71·33	86·50	102·01	117·50	133·92	150·30
11¼	28·22	42·8	57·67	72·86	88·35	104·15	120·26	136·67	153·4
11½	28·84	43·71	58·9	74·39	90·19	106·3	122·71	139·44	156·44
11¾	29·45	44·64	60·13	75·93	92·04	108·45	125·18	142·18	159·55
12	30·06	45·55	61·	77·46	93·6	110·6	127·25	144·96	163·
13	...	...	...	84·4	102·2	120·4	138·8	157·5	176·6
14	...	...	...	90·6	109·6	129·0	148·8	168·7	189·0
15	...	...	...	96·8	117·0	137·7	158·7	179·8	201·4
16	...	...	...	...	124·5	146·4	168·6	181·0	213·8
17	...	...	...	...	131·9	155·1	178·5	202·1	224·2
18	...	...	...	...	139·4	163·7	188·4	213·3	238·5
19	...	...	...	...	...	172·4	198·3	224·4	250·9
20	...	...	...	...	...	181·1	208·2	235·6	263·3
21	...	...	...	...	...	...	218·2	246·7	275·7
22	...	...	...	...	...	...	228·1	257·9	288·1
23	...	...	...	...	...	...	238·0	269·0	300·5
24	...	...	...	...	...	...	247·9	280·2	312·9

WEIGHT OF CAST IRON PIPES.

Diameter of Pipe.	Metal 5-8ths thick.			Metal 3-4ths thick.			Metal 7-8ths thick.			Metal 1 inch thick.		
	Weight of Flanges, ¾ thick, no beads.	Weight of Pipe, 1 Foot long.	Weight of Pipe, 9 Feet long.	Weight of Flanges, 2½ broad, ¾ thick, no beads.	Weight of Pipe, 1 Foot long.	Weight of Pipe, 9 Feet long.	Weight of Flanges, 3 broad, 1 thick, no beads.	Weight of Pipe, 1 Foot long.	Weight of Pipe, 9 Feet long.	Weight of Flanges, 3 broad, 1 thick, no beads.	Weight of Pipe, 1 Foot long.	Weight of Pipe, 9 Feet long.
Inches.	Lbs.	Lbs.	Cwt. qr. lbs.	Lbs.	Lbs.	Cwt. qr. lbs.	Lbs.	Lbs.	Cwt. qr. lbs.	Lbs.	Lbs.	Cwt. qr. lbs.
4	23·3	28·1	2 1 24	24·1	34·6	2 3 27	00·0	00·0	0 0 00	00·0	00·0	0 0 00
4½	25·0	31·0	2 2 25	25·7	38·1	3 1 4	—	—	—	—	—	—
5	26·5	34·2	2 3 26	27·3	41·9	3 2 12	—	—	—	—	—	—
5½	28·1	37·3	3 1 0	29·0	45·6	3 3 19	—	—	—	—	—	—
	Flanges 1 inch thick.			Flanges 1 inch thick.			Flanges 1 inch thick.			Flanges 1 inch thick.		
6	39·5	40·4	3 2 11	40·5	49·2	4 1 6	41·5	58·4	5 0 7	42·5	68·0	5 3 10
6½	41·5	43·4	3 3 12	42·5	52·9	4 2 14	43·5	62·9	5 1 21	44·5	72·9	6 1 0
7	43·5	46·4	4 0 13	44·5	56·5	4 3 21	45·5	67·1	5 3 5	46·5	77·8	6 2 18
7½	45·5	49·4	4 1 14	46·5	60·1	5 0 27	47·5	71·3	6 0 17	48·5	82·5	7 0 7
8	47·6	52·4	4 2 15	48·6	63·7	5 2 6	49·6	75·5	6 2 1	50·6	87·3	7 1 24
8½	49·6	55·4	4 3 16	50·7	67·3	5 3 12	51·7	79·7	6 3 13	52·7	92·1	7 3 12

WEIGHT OF CAST IRON PIPES,—CONTINUED.

	Metal 3-4ths thick. (Two beads.) Flanges 3 inches broad.					Metal 7-8ths thick. (Two beads.) Flanges 3 inches broad.					Metal 1 inch thick. (Two beads.) Flanges 3 inches broad.					Metal 1⅛ inch thick. (Two beads.) Flanges 3 inches broad, 1¼ thick.				
Inches.	Lbs.	Lbs.	Cwt.	qr.	lbs.	Lbs.	Lbs.	Cwt.	qr.	lbs.	Lbs.	Lbs.	Cwt.	qr.	lbs.	Lbs.	Lbs.	Cwt.	qr.	lbs.
9	83·0	71·0	6	1	22	86·0	84·0	7	2	2	88·0	97·1	8	2	10	107·8	111·2	9	3	16
9½	87·0	74·5	6	3	1	88·5	88·2	7	3	14	90·0	102·0	9	0	0	110·9	116·5	10	1	11
10	89·5	78·7	7	0	10	91·0	92·5	8	0	27	92·2	106·9	9	1	18	114·0	121·8	10	3	6
10½	92·2	82·7	7	1	18	93·5	96·8	8	2	12	94·7	111·8	9	3	8	117·2	127·2	11	1	2
11	95·1	86·4	7	2	25	95·8	101·0	8	3	25	97·5	116·7	10	0	26	120·3	132·6	11	2	25
11½	98·2	90·0	8	0	4	98·0	105·3	9	1	9	100·5	121·6	10	2	17	123·4	138·0	12	0	21
12	101·2	93·0	8	1	12	102·5	109·8	9	2	22	103·8	126·4	11	0	8	126·6	143·5	12	2	18
12½	103·8	96·6	8	2	20	105·8	114·0	10	0	8	107·0	131·2	11	2	0	129·7	149·1	13	0	15
13	106·7	100·2	9	0	0	109·2	118·1	10	1	22	110·2	136·1	11	3	19	132·8	154·6	13	2	12
13½	108·6	103·8	9	1	6	111·8	122·3	10	3	7	113·0	140·9	12	1	10	136·0	160·0	14	0	8
14	109·2	107·5	9	2	12	114·5	126·6	11	0	22	115·7	145·8	12	3	0	139·1	165·2	14	2	4
14½	110·7	111·1	9	3	18	117·3	130·9	11	2	7	118·5	150·6	13	0	18	142·3	170·9	15	0	0
15	111·8	114·8	10	0	25	120·1	135·1	11	3	20	121·2	155·5	13	2	9	145·5	176·4	15	1	25
15½	113·2	118·4	10	2	3	122·2	139·4	12	1	5	123·3	160·4	13	3	27	148·6	181·9	15	3	22
16	114·7	122·0	10	3	8	124·3	143·6	12	2	17	125·5	165·3	14	1	17	151·6	187·3	16	1	18
16½	116·0	126·5	11	0	14	126·4	147·9	13	0	2	128·1	170·2	14	3	7	154·7	192·8	16	3	14
17	117·1	129·3	11	1	21	128·5	152·1	13	1	13	130·7	175·0	15	0	26	157·8	198·3	17	1	10
17½	118·5	132·9	11	3	0	130·7	156·4	13	2	26	132·8	179·9	15	2	16	160·9	203·7	17	3	6
18	120·0	136·7	12	0	6	133·0	160·6	14	0	10	135·0	184·8	16	0	6	164·0	209·3	18	1	3
19	000·0	000·0	00	0	0	137·5	169·1	14	3	7	139·7	194·5	16	3	24	170·2	220·2	19	0	24
20	000·0	000·0	00	0	0	142·0	177·6	15	2	4	144·4	204·2	17	2	22	176·4	231·1	20	0	16
21	000·0	000·0	00	0	0	146·5	186·1	16	1	1	149·1	214·0	18	2	11	182·6	242·0	21	0	8
22	000·0	000·0	00	0	0	151·0	194·6	16	3	26	153·8	224·6	19	1	19	188·8	252·9	22	0	1
23	000·0	000·0	00	0	0	155·5	203·1	17	2	23	158·8	233·3	20	0	18	195·0	263·9	22	3	22
24	000·0	000·0	00	0	0	161·0	211·6	18	1	20	163·3	243·1	20	3	27	201·2	274·9	23	3	15

CAST IRON CYLINDERS.—*Weight per Lineal Foot.*

Dia. of Bore.	½ Inch Thick.	¾ Inch Thick.	1 Inch Thick.	1¼ Inch Thick.	1½ Inch Thick.	2 Inch Thick.	2½ Inch Thick.	3 Inch Thick.	3½ Inch Thick.
Inches.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
1	7·36	12·89	19·63	28·75	37·	58·50	85·	118·	154·
2	12·25	20·25	29·45	40·	51·20	78·	110·	147·	188·
3	17·18	27·62	39·25	52·20	66·	98·	134·50	176·	223·
4	22·1	34·98	49·	64·25	80·	117·	158·	205·	255·
5	27·	42·25	58·90	76·25	95·	136·	183·	233·	290·
6	31·90	49·50	68·50	89·	110·	156·	207·	262·	324·
7	36·80	56·84	78·50	101·25	124·	175·	232·	292·	357·
8	41·70	64·42	88·25	114·	138·	195·	255·	320·	392·
9	46·50	71·50	98·50	126·	153·	214·	280·	351·	425·
10	51·50	79·16	108·	138·	168·	234·	304·	380·	462·
11	56·25	86·50	117·50	150·30	183·	253·	330·	411·	495·
12	61·	93·6	127·25	163·	196·	273·	355·	439·	529.
13	65·50	100·	136·	175·	212·	293·	376·	466·	562.
14	70·50	108·	146·	188·	227·	312·	403·	499·	596.
15	75·50	115·	156·	200·	241·	331·	425·	526·	630.
16	80·30	121·	166·	213·	256·	352·	450·	552·	660.
17	85·	129·	175·	225·	271·	370·	474·	583·	696.
18	90·	137·	185·	236·	284·	389·	510·	612·	730.
19	95·	144·	195·	249·	298·	409·	521·	641·	768.
20	100·	151·	205·	262·	314·	428·	545·	671·	800.
21	105·	159·	214·	273·	329·	447·	573·	700·	835.
22	109·	166·	223·	285·	343·	467·	595·	730·	870.
23	114·	173·	233·	298·	358·	487·	620·	760·	904.
24	120·	182·	245·	310·	374·	508·	648·	793·	942.
25	125·	189·	255·	322·	390·	528·	672·	820·	978.
26	130·	196·	265·	335·	404·	547·	698·	851·	1010·
27	135·	203·	274·	348·	420·	568·	720·	880·	1045·
28	140·	213·	286·	360·	435·	590·	750·	912·	1080·
29	145·	220·	296·	372·	450·	610·	773·	945·	1120·
30	150·	227·	305·	384·	465·	630·	800·	975·	1150·
31	155·	235·	315·	398·	480·	650·	821·	1000·	1190·
32	160·	242·	325·	410·	494·	668·	850·	1030·	1225·
33	165·	249·	335·	423·	510·	688·	873·	1060·	1260·
34	170·	257·	345·	443·	523·	710·	895·	1090·	1290·

CAST IRON PIPES.—*Weight per Lineal Foot.*

Dia. of Bore.	1⅜ Inch Thick.	1½ Inch Thick.	Dia. of Bore.	1⅜ Inch Thick.	1½ Inch Thick.	Dia. of Bore.	1⅜ Inch Thick.	1½ Inch Thick.
Inch.	lbs.	lbs.	Inch.	lbs.	lbs.	Inch.	lbs.	lbs.
2¼	48·94	55·22	5¾	95·96	106·77	9	140·06	154·64
2½	52·30	58·9	6	99·56	110·44	9¼	143·43	158·3
2¾	55·68	62·58	6¼	102·92	114·13	9½	146·8	161·99
3	59·06	66·27	6½	106·31	117·81	9¾	158·18	165·67
3¼	62·43	69·95	6¾	109·68	121·49	10	153·55	169·35
3½	65·81	73·63	7	113·05	125·17	10¼	156·92	173·03
3¾	69·18	77·31	7¼	116·43	128·86	10½	160·3	176·71
4	72·56	81·	7½	119·81	132·54	10¾	163·67	180·4
4¼	75·99	84·73	7¾	123·18	136·22	11	167·06	184·06
4½	79·3	88·35	8	126·55	139·89	11¼	170·4	187·76
4¾	82·68	92·04	8¼	129·92	143·58	11½	173·8	191·44
5	86·05	95·72	8½	133·53	147·49	11¾	177·18	195·12
5¼	89·44	99·41	8¾	136·68	150·94	12	180·54	198·8
5½	92·81	102·86						

SHEET COPPER AND SHEET LEAD.

SHEET COPPER.			SHEET LEAD.		
Weight. Pounds.	Thickness. Inch.	Size of Plate.	Weight. Pounds.	Thickness. Inch.	Size of Plate.
70	3/16	4 feet by 2 feet.	4	1/16	1 foot by 1 foot.
46½	⅛		6	1/10	
23	1/16		7½	⅛	
11½	1/32		11	3/16	
6	1/64		15	¼	

BRASS, COPPER, LEAD, AND STEEL.—*Weight of a Lineal Foot of Round and Square.*

	BRASS.		COPPER.		LEAD.		STEEL.	
Diameter and Side of Square.	Weight of Round.	Weight of Square.	Weight of Round.	Weight of Square.	Weight of Round.	Weight of Square.	Weight of Round.	Weight of Square.
Inches.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
¼	·17	·22	·188	·24	......	......	·167	·213
⅜	·39	·50	·424	·54	......	......	·376	·479
½	·70	·90	·755	·96	......	......	·669	·855
⅝	1·10	1·40	1·17	1·50	......	......	1·04	1·33
¾	1·59	2·02	1·69	2·16	......	......	1·50	1·91
⅞	2·16	2·75	2·31	2·94	......	......	2·05	2·61
1	2·83	3·60	3·02	3·84	3·87	4·93	2·67	3·40
1⅛	3·58	4·56	3·82	4·86	4·90	6·25	3·38	4·34
1¼	4·42	5·63	4·71	6·	6·06	7·71	4·18	5·32
1⅜	5·35	6·81	5·71	7·27	7·33	9·33	5·06	6·44
1½	6·36	8·10	6·79	8·65	8·72	11·11	6·02	7·67
1⅝	7·47	9·51	7·94	10·15	10·24	13·04	7·07	9·
1¾	8·66	11·03	9·21	11·77	11·87	15·12	8·20	10·14
1⅞	9·95	12·66	10·61	13·52	13·63	17·36	9·41	11·98
2	11·32	14·41	12·08	15·38	15·51	19·75	10·71	13·63
2⅛	12·78	16·27	13·64	17·36	17·51	22·29	12·05	15·80
2¼	14·32	18·24	15·29	19·47	19·63	25·	13·51	17·20
2⅜	15·96	20·32	17·03	21·69	21·80	27·80	15·05	19·17
2½	17·68	22·53	18·87	24·03	24·24	30·86	16·68	21·21
2⅝	19·50	24·83	20·81	26·50	26·72	34·02	18·39	23·41
2¾	21·40	27·25	22·84	29·08	29·33	37·34	20·18	25·70
2⅞	23·39	29·78	24·92	31·79	32·05	40·81	22·06	28·10
3	25·47	32·43	27·18	34·61	34·90	44·44	24·23	30·60

GAS PIPING.—*Weight per Yard, in Ounces.*

DENOMINATION.	Diameter of Bore, 1-4th In.	Diameter of Bore, 3-8thsIn.	Diameter of Bore, ½ In.	Diameter of Bore, 5-8thsIn.	Diameter of Bore. ¾ In.	Diameter of Bore. 1 In.
	oz.	oz.	oz.	oz.	oz.	oz.
Composition Piping,......	13½	20	30	44	56	88
Tin Piping, ...	4½	7	9	13	16	26
Copper Piping, ...	11	18	24	30	36	42

COPPERS.—*Table showing the Dimensions and Weight from* 1 *to* 208 *Gallons.*

THE DIMENSIONS TAKEN FROM LAG TO BRIM.

Inches lag to brim.	Gallons.	Weight. in lbs.	Inches lag to brim.	Gallons.	Weight in lbs.	Inches lag to brim.	Gallons.	Weight in lbs.
9¾	1	2	24	15	24½	29½	29	54½
12¼	2	3¾	24½	16	26	30	30	56
14	3	4¾	25	17	27½	32	36	72
15½	4	6¼	55½	18	30	34	43	78
16½	5	8	26	19	32	35	48	85
17½	6	9¾	26½	20	33½	36	53	92
18½	7	11½	26¾	21	36	37	58	100
19½	8	13½	27	22	38½	38	63	108
20¼	9	15	27¼	23	40½	39	67	117
21	10	16½	27½	24	42	40	71	127
21½	11	18	27¾	25	44	45	104	168
22	12	19½	28	26	46½	50	146	237
22½	13	21	28½	27	49	55	208	339
23¼	14	23	29	28	52			

STEEL.—*Weight of a Lineal Foot of Flat.*

Width.	Thick, 1-4th.	Thick, 3-8ths.	Thick, ½ in.	Thick, 5-8ths.	Width.	Thick, 1-4th.	Thick, 3-8ths.	Thick, ½ in.	Thick, 5-8ths.
Inches.	Pounds.	Pounds.	Pounds.	Pounds.	Inches.	Pounds.	Pounds.	Pounds.	Pounds.
1	·852	1·27	1·70	2·13	2½	2·13	3·20	4·26	5·32
1⅛	·958	1·43	1·91	2·39	2¾	2·34	3·51	4·68	5·85
1¼	1·06	1·59	2·13	2·66	3	2·55	3·83	5·11	6·39
1⅜	1·17	1·75	2·34	2·92	3¼	2·77	4·15	5·53	6·92
1½	1·27	1·91	2·55	3·19	3½	2·98	4·47	5·98	7·45
1¾	1·49	2·23	2·98	3·72	3¾	3·19	4·79	6·38	7·98
2	1·70	2·55	3·40	4·26	4	3·40	5·10	6·80	8·52
2¼	1·91	2·87	3·83	4·79					

LEAD PIPES.—*Weights and Lengths, as they are usually manufactured.*

Bore in Inch.	SLENDER.		COMMON.		STRONG.		Bore in Inch.	SLENDER.		COMMON.		STRONG.	
	Weight per Yard, in lbs.	Length usually manufactured, in Yards.	Weight per Yard, in lbs.	Length usually manufactured, in Yards.	Weight per Yard, in lbs.	Length usually manufactured, in Yards.		Weight per Yard, in lbs.	Length usually manufactured, in Yards.	Weight per Yard, in lbs.	Length usually manufactured, in Yards.	Weight per Yard, in lbs.	Length usually manufactured, in Yards.
Bore.	lbs.	Lgth.	lbs.	Lgth.	lbs.	Lgth.	Bore.	lbs.	Lgth.	lbs.	Lgth.	lbs.	Lgth.
¼	...	...	...	...	4½	20	1½	14	13	17	11	20	7
⅜	...	...	...	...	6	25	1¾	17	8	22	7	...	...
½	3½	50	4½	40	7	25	2	21	4	24	4	28	4
⅝	5	35	6	30	9	20	2½	32	4	37	4	44	4
¾	6	28	7	24	9	20	3	35	4	...	...	44	4
1	7	25	9	20	10	16	3½	45	3⅓	...	...	54	3
1¼	8½	18	12	14	21	8	4	53	3	63	3	...	...

Extra Strong ⅝	...	6 lbs. per yard	...	25	yards.
Do. ¾	...	11 do.	...	16	do.
Do. 1	...	14 do.	...	14	do.
Do. 1¼	...	21 do.	...	8	do.
Do. 1½	...	31 do.	...	5½	do.

PIPES.—WROUGHT IRON, COPPER, AND LEAD.—*Weight of a Lineal Foot.*

WROUGHT IRON.			COPPER.			LEAD.		
Size of Bore.	Metal 1/8 Thick.	Metal 1/4 Thick.	Size of Bore.	Metal 1/8 Thick.	Metal 1/4 Thick.	Size of Bore.	Metal 1/8 Thick.	Metal 1/4 Thick.
Inches.	Pounds.	Pounds.	Inches.	Pounds.	Pounds.	Inches.	Pounds.	Pounds.
1/2	0·8	2·0	1/2	·94	2·27	1/2	1·21	2·90
5/8	1·0	2·4	5/8	1·14	2·65	5/8	1·49	3·41
3/4	1·2	2·7	3/4	1·33	3·02	3/4	1·69	3·88
7/8	1·4	3·0	7/8	1·51	3·40	7/8	1·94	4·37
1	1·5	3·3	1	1·69	3·77	1	2·19	4·85
1 1/8	1·6	3·6	1 1/8	1·89	4·12	1 1/8	2·43	5·34
1 1/4	1·8	3·9	1 1/4	2·08	4·50	1 1/4	2·66	5·81
1 3/8	2·0	4·3	1 3/8	2·23	4·90	1 3/8	2·91	6·30
1 1/2	2·1	4·6	1 1/2	2·42	5·29	1 1/2	3·15	6·79
1 5/8	2·3	5·0	1 5/8	2·67	5·70	1 5/8	3·39	7·27
1 3/4	2·5	5·3	1 3/4	2·87	6·08	1 3/4	3·64	7·76
1 7/8	2·7	5·7	1 7/8	3·03	6·42	1 7/8	3·88	8·17
2	2·8	6·1	2	3·21	6·79	2	4·12	8·73
2 1/8	3·0	6·3	2 1/8	3·39	7·17	2 1/8	4·29	9·21
2 1/4	3·3	6·7	2 1/4	3·58	7·55	2 1/4	4·61	9·70
2 3/8	3·4	6·9	2 3/8	3·78	7·90	2 3/8	4·92	10·25
2 1/2	3·5	7·2	2 1/2	3·97	8·31	2 1/2	5·09	10·66
2 5/8	3·6	7·6	2 5/8	4·12	8·68	2 5/8	5·33	11·15
2 3/4	3·8	7·9	2 3/4	4·34	9·12	2 3/4	5·57	11·63
2 7/8	4·0	8·3	2 7/8	4·56	9·47	2 7/8	5·82	12·12
3	4·1	8·6	3	4·78	9·82	3	6·06	12·61

BRASS TUBING FOR GAS PURPOSES.—*Weight of a Lineal Foot.*

Outside Diam.	Ounces per Foot.	Outside Diam.	Ounces per Foot.	Outside Diam.	Ounces per Foot.	Outside Diam.	Ounces per Foot.
Inch.		Inch.		Inch.		Inch.	
1/4	1·58	9/16	5·13	1	8·29	2	18·00
5/16	2·37	5/8	5·33	1 1/8	10·57	2 1/4	19·7
3/8	3·00	11/16	5·75	1 1/4	11·14	2 1/2	20·3
7/16	3·37	3/4	6·85	1 1/2	13·00	2 3/4	27·3
1/2	4·00	7/8	7·00	1 3/4	14·8	3	30·4

BRASS COCKS.—*Bore and Weight.*

Content of Copper.	Bore of Cock.	Weight of Cock.	Content of Copper.	Bore of Cock.	Weight of Cock.
Gallons.	Inches.	Pounds.	Gallons.	Inches.	Pounds.
20	1 1/4	5	250	2 3/4	50
50	1 1/2	8	300	3	70
80	1 3/4	18	350	3 1/4	80
120	2	22	400	3 1/2	90
150	2 1/4	30	500	4	110
200	2 1/2	40			

The diameter of the bore of the cock is commonly taken at the hinder part, three-fourths of which will give the diameter of the cock at the mouth.

The pipe, if soldered into the copper, is computed to weigh 1/14th of the weight of the copper before the pipe is put in; but if laid over, and put together with nails, 1/12th.

ZINC.

Modern Belgian Gauge.	Nearest corresponding Nos. of Birmingham Wire Gauge.	Weight per Square Foot.				Usual Dimensions and Weights of Sheets.					
						7 feet × 2 feet 8 inches.		7 feet × 3 feet.		8 feet × 3 feet.	
		lbs.		lbs.	oz.	lbs.	oz.	lbs.	oz.	lbs.	oz.
26	11	4·5000	or	4	8	74	0	94	8	108	0
25	12	4·2500	„	4	4	72	0	86	0	98	4½
24	13	3·9375	„	3	15	70	0	81	0	92	9
23	13½	3·6250	„	3	10	66	10	77	0	88	0
22	14	3·3125	„	3	5	60	12	70	0	80	0
21	14½	3·0000	„	3	0	55	12	63	0	70	0
20	15	2·7149	„	2	11 7/16	50	11	57	0	65	2
19	15½	2·4453	„	2	7⅛	45	10	51	5	58	10
18	16	2·1758	„	2	2 13/16	40	10	45	11	52	3½
17	17	1·9062	„	1	14½	35	9	40	0½	45	11½
16	18	1·6328	„	1	10 2/16	30	9	34	6	39	4½
15	19	1·5000	„	1	8	28	0	31	8	36	0
14	20	1·3677	„	1	5 14/16	25	7	28	10	32	11½
13	21	1·2266	„	1	3⅝	22	14	25	12	29	4½
12	22	1·0898	„	1	1 7/16	20	4	22	14	26	2
11	23	·9531	„	0	15¼	17	13	20	0	22	13¾
10	24	·8125	„	0	13	15	3	17	1	19	8
9	25	·6758	„	0	10 13/16	12	10	14	3	16	3½
8	26	·5625	„	0	9	10	8	11	13	13	8¼
7	29	·5000	„	0	8	9	5	10	8	12	0
6	30	·4375	„	0	7	8	3	9	3	10	8
5	31	·3750	„	0	6	7	0	7	14	9	0
4	33	·3125	„	0	5	5	13	6	9	7	8
3	34	·2500	„	0	4	4	11	5	4	6	0
2	35	·1875	„	0	3	3	8	3	15	4	8
1	38	·1250	„	0	2	2	5	2	10	3	0

NOTE.—The Sheets numbered 15, 16, 17, and 18, are the best adapted for Ship sheathing; No. 15 being the least used for that purpose.

For Roofing, Nos. 14 and 15 should be used; any thing of a less substance may not be sufficiently durable.

LANCASHIRE GAUGE FOR ROUND STEEL WIRE, & ALSO FOR PINION WIRE, IN DECIMAL PARTS OF AN INCH.

The smaller sizes distinguished by Numbers. The larger by Letters, and called the Letter Guage.

Mark.	Size.	Mark.	Size.	Mark.	Size.	Mark.	Size.	Mark.	Size.	Mark.	Size.	Mark.	Size.
80	·013	64	·034	48	·073	32	·115	16	·174	A	·234	R	·339
79	·014	63	·035	47	·076	31	·118	15	·175	B	·238	S	·348
78	·015	62	·036	46	·078	30	·125	14	·177	C	·242	T	·358
77	·016	61	·038	45	·080	29	·134	13	·180	D	·246	U	·368
76	·018	60	·039	44	·084	28	·138	12	·185	E	·250	V	·377
75	·019	59	·040	43	·086	27	·141	11	·189	F	·257	W	·386
74	·022	58	·041	42	·091	26	·143	10	·190	G	·261	X	·397
73	·023	57	·042	41	·095	25	·146	9	·191	H	·266	Y	·404
72	·024	56	·044	40	·096	24	·148	8	·192	I	·272	Z	·413
71	·026	55	·050	39	·098	23	·150	7	·195	J	·277	A 1	·420
70	·027	54	·055	38	·100	22	·152	6	·198	K	·281	B 1	·431
69	·029	53	·058	37	·102	21	·157	5	·201	L	·290	C 1	·443
68	·030	52	·060	36	·105	20	·160	4	·204	M	·295	D 1	·452
67	·031	51	·064	35	·107	19	·164	3	·209	N	·302	E 1	·462
66	·032	50	·067	34	·109	18	·167	2	·219	O	·316	F 1	·475
65	·033	49	·070	33	·111	17	·169	1	·227	P	·323	G 1	·484
										Q	·332	H 1	·494

TIN PLATES.—*Sizes and Weights as manufactured in England.*

	Brand Mark.	No. of Sheets pr Box.	Length and Breadth.		Weight per Box.			
			Inches.	Inches.	Cwt.	qr.	lbs.	
One Box of	1 C	225	14 by	10	1	0	0	Each X rises 6s. in price. Wasters of 1 C 2s., 1 X 3s., 1 X X 3s. less than perfect : other sizes 6s. less.
	1 x	225	14 ...	10	1	1	0	
	1 x x	225	14 ...	10	1	1	21	
	1 x x x	225	14 ...	10	1	2	14	
	1 x x x . x	225	14 ...	10	1	3	7	
	1 x x x . x x	225	14 ...	10	2	0	0	
	1 x x x . x x x	225	14 ...	10	2	0	21	
	D C	100	17 ...	12½	0	3	14	Wasters of D C 2s., D X 3s. less than perfect : other sizes 6s. less. Each X rises 6s.
	D x	100	17 ...	12½	1	0	14	
	D x x	100	17 ...	12½	1	1	7	
	D x x x	100	17 ...	12½	1	2	0	
	D x x x . x	100	17 ...	12½	1	2	21	
	D x x x . x x	100	17 ...	12½	1	3	14	
	D x x x . x x x	100	17 ...	12½	2	0	7	
	S D C	200	15 ...	11	1	1	27	All wasters 6s. less than perfects. Each X rises 6s. in price.
	S D x	200	15 ...	11	1	2	20	
	S D x x	200	15 ...	11	1	3	13	
	S D x x x	200	15 ...	11	2	0	6	
	S D x x x . x	200	15 ...	11	2	0	27	
	S D x x x . x x	200	15 ...	11	2	1	20	
	S D x x x . x x x	200	15 ...	11	2	2	13	
	TAGGERS.							
	T T T	450	14 ...	10	1	0	0	Price twice 1 C & 6s. added
One Box of	Taggers	450	14 ...	10	1	2	0	Twice 1 C & 2s. added.
	Extra Taggers	450	14½ ...	10½	1	3	0	Twice 1 C & 6s. added.
	Taggers	450	14½ ...	9	1	2	0	4s. less than 14½ by 10½.
	S D Taggers	450	15 ...	11	1	3	7	4s. more than 14½ by 10½.
	Taggers	450	13½ ..	10½	1	2	14	Same as 14½ by 9.
	Do.	450	13 ...	10	1	2	0	
	Large Size Tag.	450	15½ ...	11½	1	3	21	4s. more than 15 by 11.
	Irregular Sizes	at			per lb.,			according to size.
	Leaded or Ternes 1 C	112	14 ...	20	1	0	0	2s. less than 1 C 14 by 10 Tinned Plates.
	Leaded or Ternes 1 x	112	14 ...	20	1	1	0	6s. more than above.

MELTING POINTS OF VARIOUS METALS.

Welding heat of iron 12,780° Fah.... 1 foot in length contracts in cooling ·137 of an inch.
Power of conducting heat to another body 37·41.
Cast Iron melts at 2786° Fah. .... contracts in cooling ·125.
Conducting heat .... 65·76.
Copper melts at 1996° Fah. .... contracts in cooling ·193.
Conducting heat .... 89·82.
Brass melts at 3807° Fah. .... contracts in cooling ·210.
Conducting heat about the same as copper.
Lead melts at 612° Fah. .... contracts in cooling ·319.
Conducting heat .... 17·96.
Tin melts at 442° Fah. .... contracts in cooling ·278.
Conducting heat .... 30·38.
Water expands in heating from 32° to 212°, about ·0434 of its bulk.

TABLE OF ALLOYS.

Alloys having a Density greater than the Mean of their Constituents.

Gold and zinc.
Gold and tin.
Gold and bismuth.
Gold and antimony.
Gold and cobalt.
Silver and zinc.
Silver and lead.
Silver and tin.
Silver and bismuth.
Silver and antimony.
Copper and zinc.
Copper and tin.
Copper and palladium.
Copper and bismuth.
Lead and antimony.
Platinum and molybdenum.
Palladium and bismuth.

Alloys having a Density less than the Mean of their Constituents.

Gold and silver.
Gold and iron.
Gold and lead.
Gold and copper.
Gold and iridium.
Gold and nickel.
Silver and copper.
Silver and lead.
Iron and bismuth.
Iron and antimony.
Iron and lead.
Tin and lead.
Tin and palladium.
Tin and antimony.
Nickel and arsenic.
Zinc and antimony.

ALLOYS FOR BRONZE.

Professor Hoffman, of the Prussian artillery, has made experiments with the view of obtaining a good statuary bronze, and recommends the alloys ranging between the two following admixtures:—

1st.—To produce the reddest bronze.
88·75 Copper-zinc (7 atoms copper, 1 atom zinc.)
11·25 Copper-tin (3 atoms copper, 1 atom tin.)

100·00

2nd.—To produce a cheap bronze, with a bright yellow colour, almost golden.
93·5 Copper-zinc (2 atoms copper, 1 atom zinc.)
6·5 Copper-tin (3 atoms copper, 1 atom tin.)

100·0

ALLOYS OF COPPER AND ZINC, AND OF COPPER AND TIN.

Composition by Weight per Cent.	Specific Gravity.	Colour.	Ultimate Cohesive Strength of an In. square Bar, in Tons.	Characteristic Properties, &c.
Copper	8667	Tile red.	24·6	Malleable.
100·00 Zinc	6895	Bluish gray.	15·2	Brittle.
83·02 + 16·98	8415	Yellowish red.	13·7	Bath metal.
79·65 + 20·35	8448	Do.	14·7	Dutch brass.
74·58 + 25·42	8397	Pale yellow.	13·1	Rolled sheet brass.
66·18 + 33·82	8299	Full yellow.	12·5	British brass.
49·47 + 50·53	8230	Do.	9·2	German brass.
32·85 + 67·15	8283	Deep yellow.	19·3	Watchmakers' brass.
30·30 + 69·70	7836	Silver white.	2·2	Very brittle.
24·50 + 75·50	7449	Ash gray.	3·1	Brittle.
19·65 + 80·35	7371	Do.	1·9	White button metal.
Tin	7291	White.	2·7	
84·29 + 15·71	8561	Reddish yellow.	16·1	Gun metal.
81·10 + 18·90	8459	Yellowish red.	17·7	Gun metal and bronze.
78·97 + 21·03	8728	Do.	13·6	Hard, mill brasses.
34·92 + 65·08	8056	White.	1·4	Small bells.
15·17 + 84·83	7447	Very white.	3·1	Speculum metal.
11·82 + 88·18	7472	Do.	3·1	Files tough.

Note.—No simple binary alloy of copper and zinc, or of copper and tin, works as pleasantly in turning, planing, or filing, as if combined with a small proportion of a third fusible metal; generally lead is added to copper and zinc, and zinc to copper and tin.

MISCELLANEOUS ALLOYS AND COMPOSITIONS.

Chinese White Copper.—40·4 parts copper, 31·6 nickel, 25·4 zinc, and 2·6 iron.

German Silver.—1 part nickel, 1 zinc, and 2 copper; when intended for rolling into plates—25 nickel, 20 zinc, and 60 copper, to which may be added 3 of lead.

Tombac, or Red Brass.—8 parts copper, 1 part zinc.

Manheim Gold.—3 parts copper, 1 zinc, and a small quantity of tin.

Alloy of the Standard Measures used by Government.—576 parts copper, 59 tin, and 48 brass.

Bath Metal.—32 parts brass, 9 parts zinc.

Speculum Metal.—6 parts copper, 2 parts tin, and 1 of arsenic; or, 7 of copper, 3 of zinc, and 4 of tin.

Hard Solder.—2 parts copper and 1 part zinc.

Blanched Copper.—1 part of copper and 1 part arsenic.

Britannia Metal.—1 part of brass and 1 of tin; when fused, add 1 of bismuth and 1 of antimony. This composition is added at discretion to melted tin.

Plumber's Solder.—Equal parts of lead and tin.

Tinman's Solder.—2 parts of lead and 1 part of tin.

Pewterer's Solder.—2 parts of tin and 1 of lead.

Common Pewter.—4 parts of tin and 1 of lead.

Best Pewter.—100 parts of tin and 17 of antimony.

A Metal that Expands in Cooling.—9 parts of lead, 2 of antimony, and 1 of bismuth. This metal is very useful in filling small defects in iron castings, &c.

Queen's Metal.—9 parts of tin, 1 of antimony, 1 of bismuth, and 1 of lead.

Mock Platinum.—8 parts of brass and 5 of zinc.

Silver Coin of Britain.—11$\frac{1}{10}$th pure silver and $\frac{9}{10}$ths copper.

Gold Coin of Britain.—11 parts pure gold and 1 copper. Previous to 1826, silver formed part of the alloy of gold coin; hence the different colour of our gold money.

Ring Gold.—6 dwts. 12 grains pure copper, 3 dwts. 16 grains fine silver, and 1 ounce 5 dwts. pure gold; or, 39 copper, 22 silver, and 150 gold.

Mock Gold.—Fuse together 16 parts of copper, 7 of platinum, and 1 of zinc. When steel is alloyed with $\frac{1}{500}$th part of platinum, or with $\frac{1}{500}$th part of silver, it is rendered much harder, more malleable, and better adapted for every kind of cutting instrument.

Note.—In making alloys; care must be taken to have the more infusible metals melted first, and afterwards add the others.

Composition used in Welding Cast Steel.—Take of borax 10 parts, sal-ammoniac 1 part; grind or pound them roughly together; then fuse them in a metal pot over a clear fire, taking care to continue the heat until all spume has disappeared from the surface. When the liquid appears clear, the composition is ready to be poured out to cool and concrete; afterwards, being ground to a fine powder, it is ready for use.

To use this composition, the steel to be welded is raised to a heat which may be expressed by "bright yellow;" it is then dipped among the welding powder, and again placed in the fire until it attains the same degree of heat as before; it is then ready to be placed under the hammer.

Cast-Iron Cement.—Take of clean borings or turnings of cast iron 16 parts, of sal-ammoniac 2 parts, and flour of sulphur 1 part; mix them well together in a mortar, and keep them dry. When required for use, take 1 part of the mixture and 20 parts of clean borings, mix thoroughly, and add a sufficient quantity of water.

Note.—A little grindstone dust added improves the cement.

Booth's Patent Grease for Railway Axles.—Water 1 gallon, clean tallow 3 lbs., palm oil 6 lbs., common soda ½ lb.; or, tallow 8 lbs., and palm oil 10 lbs. The mixture to be heated to about 210° Fahrenheit, and well stirred till it cools down to about 70°, when it is ready for use.

Cement for Steam-Pipe Joints, &c., with faced flanges.—To 2 parts of white lead mixed, add 1 part red lead dry, grind or otherwise mix them to a consistence of thin putty, apply interposed layers with one or two thicknesses of canvas or gauze wire, as the necessity of the case may require.

VALUABLE ALLOYS.

The "Paris Scientific Review" has published, for the benefit of the industrious workers in metals, the best receipts for composing all the various factitious metals used in the arts; the following are a few:—

Statuary Bronze.—Darcet has discovered that this is composed of copper, 91·4; zinc, 5·5; lead, 1·7; tin, 1·4.

Bronze for Cannon of large calibre.—Copper, 90; tin, 7.

Pinchbeck.—Copper, 5; zinc, 1.

Bronze for Cannon of small calibre.—Copper, 93; tin, 7.

Bronze for Medals.—Copper, 100; tin, 8.

Alloy for Cymbals.—Copper, 80; tin, 20.

Metal for the Mirrors of Reflecting Telescopes.—Copper, 100; tin, 50.

White Argentan.—Copper, 8; nickel, 3; zinc, 35: this beautiful composition is an imitation of silver.

Chinese Silver.—M. Mairer discovered the following proportions.—Silver, 2·5; copper, 65·24; zinc, 19·52; nickel, 13; cobalt of iron, 0·12.

Tutenag.—Copper, 8; nickel, 3; zinc, 5.

Printing Characters.—Lead, 4; antimony, 1. For stereotype plates,—Lead, 9; antimony, 2; bismuth, 2.

Gun Metal.—Copper, 9; tin, 1.

Steps.—Copper, 6; tin, 1.

Alloys that are of greater Tenacity than the Sum of their Constituents, as determined by the Experiments of Muschenbroek.

Swedish copper 6 parts, Malacca tin 1;	tenacity per square inch	64,000	lbs.
Chili copper 6 parts, Malacca tin 1;	„ „	60,000	„
Japan copper 5 parts, Banca tin 1;	„ „	57,000	„
Anglesea copper 6 parts, Cornish tin 1;	„ „	41,000	„
Common block tin 4, lead 1, zinc 1;	„ „	13,000	„
Malacca tin 4, regulus of antimony 1;	„ „	12,000	„
Block tin 3, lead 1;	„ „	10,200	„
Block tin 8, zinc 1;	„ „	10,000	„
Lead 1, zinc 1;	„ „	4,500	„

NAILS.—*Weight and Length.*

	Number to the lb. avoir.	Inches in length.		Number to the lb. avoir.	Inches in length.
Fine sprigs	4560	·44	Cast-iron nails	380	1·00
Ditto	3200	·53	Fivepenny nails	139	2·00
Threepenny brads	618	1·25	Sixpenny nails	73	2·50

MALLEABLE IRON.

DEFINITION OF THE SEVERAL NAMES GIVEN TO MALLEABLE IRON, WITH A SPECIFICATION OF THEIR SIZES.

BIRMINGHAM WIRE GAUGE.

No. 0000. 000. 00. 0. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36.

THICKNESS OF THE BIRMINGHAM WIRE GAUGE.

No. of Gauge.	Thickness in decimals of an inch.	No. of Gauge.	Thickness in decimals of an inch.	No. of Gauge.	Thickness in decimals of an inch.	No. of Gauge.	Thickness in decimals of an inch.
0000	·454	7	·180	17	·058	27	·016
000	·425	8	·165	18	·049	28	·014
00	·380	9	·148	19	·042	29	·013
0	·340	10	·134	20	·035	30	·012
1	·300	11	·120	21	·032	31	·010
2	·284	12	·109	22	·028	32	·009
3	·259	13	·095	23	·025	33	·008
4	·238	14	·083	24	·022	34	·007
5	·220	15	·072	25	·020	35	·005
6	·203	16	·065	26	·018	36	·004

BAR IRON, ROLLED.

COMMON SIZES.

Bar Iron, Square, $\frac{5}{8}$ inch and up to 3 inches square.
.... Round, $\frac{5}{8}$ do. do. diameter.
.... Flat, $1\frac{1}{8}$ by $\frac{1}{4}$ do. and up to 6 inches by 1 inch.

Larger Sizes are charged extra.

Note.—These Sizes are designated "Usual Sizes," and are the Standards from which makers regulate their prices.

SMALL IRON IN BUNDLES.

.... Flat, 1 by $\frac{1}{4}$.
.... $\frac{7}{8}$ by $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, and $\frac{5}{8}$.
.... $\frac{3}{4}$ by $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$, $\frac{9}{16}$, and $\frac{5}{8}$.
.... $\frac{5}{8}$ by $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{7}{16}$, $\frac{1}{2}$.
.... Round, $\frac{9}{16}$ths $\frac{1}{2}$ diameter.
.... Square, $\frac{9}{16}$ths $\frac{1}{2}$ square.

These Sizes are charged extra.

SMALL SQUARES AND ROUNDS.

.... Square, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$.
.... Round, $\frac{1}{4}$, $\frac{5}{16}$, $\frac{3}{8}$.

These Sizes are charged extra.

WIRE IRON.

Bar Iron, Round, No. 1 to No. 10 Wire Gauge.

HALF ROUND GIG AND COACH TIRE.

Bar Iron, 1¼ broad, ⅜ in centre.
.... 1½ do. ½ & ⅝ do.
.... 1¾ do. ⅝, ¾, ⅞ do.
.... 2 do. ¾, ⅞, 1 do.
.... Angle or Gunnel, and
T Iron, 1 to 3½ inches, measuring from the Angle each way.

Larger Sizes are charged extra.

Bar Iron, Oval, sundry sizes.
.... Bevel.
.... Grate Bar Iron.

FANCY IRON.

.... Denominated Fancy Iron, for the purpose of sash windows, moulding iron, virandas, flower-pot stands and frames, garden seats, gates, fencing, and other ornamental work.

.... Railway Bars.—Sundry sections.
.... Do. Wheel Spoke Iron.—Sundry sections.
.... Do. do. Tire Bars, sundry sections, up to 3 cwt. each bar.
.... Railway Axles, up to 3 cwt. each axle.

Larger Sizes are charged extra.

ROD, OR SLIT IRON.*

Rods,	No. 0 0	No. 8 W. G.
	0	8 do.
Tack Cut,	1	7 do.
Fine Small,	2	4 do.
Common Small,	3	3 do.
Wire Cut,	4	1 do.
Middle Cut,	5	$\frac{5}{16}$ inch full.
	7	$\frac{7}{16}$ do.
Small Tread,	8	½ do.
	9	$\frac{9}{16}$ do.
Large Tread,	10	⅝ do.
	11	$\frac{11}{16}$ do.
Big Big,	12	⅞ do.
	13	⅞ do.
	14	1 do.

...... Casement, 1½ inch broad, ⅛ to ⅜ thick.
...... for Nuts, ¾ to 1¼ inch broad, by ¼, $\frac{5}{16}$, ⅜, ½, and ⅝ inch thick.

Note.—Nail-makers designate the sizes of their Rods, Double Cipher, Single Cipher, Tack Cut, Fine Small, Common Small, and describe the thickness of the Rod, viz., Half-rod, Five-eighths, Three-quarters, Seven-eighths, and Square. The ½ Rod is as much in thickness as half the breadth of the Rod, let the size be what it may in breadth; ⅝ is a little thicker than ½ Rod; ¾ should be cut half way between ½ Rod and Square, and bears a proportion of ¾ in thickness to the breadth of the Rod; ⅞ is still stronger than ¾, and is between ¾ and a full size.

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* The first Mill erected in England for slitting iron into nail-rods, was erected at Kirkstall Forge, near Leeds, about the year 1594.

PATTEN RING.

Rods, Dozen Rings,	$\frac{3}{8}$ broad,	Nos. 5 and 6	W. G.	thickness.
.... Weight Rings,	$\frac{7}{16}$ do.	6	do.	do.
.... Dozen Tread,	$\frac{1}{2}$ do.	4 and 6	do.	do.
.... Weight Tread,	$\frac{9}{16}$ do.	3, 4, 5,	do.	do.
.... Little Oval,	$\frac{5}{8}$ do.	8	do.	do.

SPRIG RODS.

Sprig Rods, $\frac{5}{8}$ and $\frac{3}{4}$ inch broad, and Nos. 6, 7, 8, 9, on Rod Gauge.—Thickness on the Wire Gauge, Nos. 13, 14, 15, 16.

USES,

Made by the Forge Hammer, Round, Square, and Flat, 1 to 30 cwt. each and upwards.

Molds, Share, Arm, and Hammer.
.... Scale, Gavelock, and Sword.

SHIP-WORK.

Anchor Shanks and Flukes.
Anchor Stocks and Rudder Irons.
Anchor Palms, 8 to 28 inches in width.
Ship Knees and Windlass Necks.
Clincher Rings, cut all sizes.

HOOP IRON.

Cooper Hoops, $\frac{3}{4}$ to 4 inches broad, Nos. 12 to 20 Wire Gauge, the regular sizes of which are

Width.	Gauge.	Width.	Gauge.
$\frac{5}{8}$ and $\frac{3}{4}$	No. 20	$1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$, $1\frac{5}{8}$ inch.	No. 16
$\frac{7}{8}$	19	$1\frac{3}{4}$, $1\frac{7}{8}$, 2, $2\frac{1}{8}$, $2\frac{1}{4}$, $2\frac{3}{8}$, in.	15
1	18	$2\frac{1}{2}$, $2\frac{5}{8}$, $2\frac{3}{4}$, $2\frac{7}{8}$, 3 in. ...	14
$1\frac{1}{8}$	17	$3\frac{1}{4}$, $3\frac{1}{2}$, $3\frac{3}{4}$ inches, ...	13
$1\frac{1}{4}$	16	4 inches,..................	12

Barrel Hoops, 1, $1\frac{1}{16}$, $1\frac{1}{8}$, inch wide, Nos. 16 to 18 Wire Gauge; cut 4 to 6 feet long, or any intermediate length.

Puncheon Hoops, $1\frac{1}{4}$ and $1\frac{3}{8}$ inch wide,—8 feet, 8 feet 6 in., to 9 feet long; Nos. 15 and 16 Wire Gauge.

Butt Hoops, $1\frac{3}{4}$, $1\frac{7}{8}$, 2, and $2\frac{1}{4}$ inches broad, 10 to 12 feet long.

Vat Hoops, 3 to 4 inches broad, Nos. 8, 9, 10, and 11 Wire Gauge; 20 to 30 feet long.

Mast Hoops, 3 to 6 inches broad, $\frac{3}{16}$ to $\frac{1}{4}$ inch thick, 12 to 20 feet long.

Mill-Stone Hoops, 5 to 6 inches broad, Nos. 10 and 11 Wire Gauge.

Coach and Nave Hoops, $1\frac{1}{2}$ to 3 inches broad, $\frac{1}{8}$ to $\frac{3}{16}$ thick.

Clog Hoops, $\frac{3}{4}$ to $1\frac{1}{4}$ inch wide, Nos. 11 to 14 Wire Gauge.
Chain Hoops, $\frac{1}{2}$ to $\frac{3}{4}$ inch wide, No. 10 Wire Gauge.

PLATE AND ROLLED IRON.

Boiler Plate, various lengths and breadths, $\frac{3}{16}$ to $\frac{3}{4}$ inch thick, up to $2\frac{1}{2}$ cwt. each plate.

Larger Sizes are charged extra.

Box Plate for Coaches, 7 to 10 inches broad, $\frac{3}{16}$ to $\frac{3}{8}$ thick.
Bend or Stem Plate, 4 to 6 inches broad, $\frac{3}{16}$ to $\frac{3}{8}$ thick.
Sock or Share Bars, 8 to 12 inches broad, $\frac{1}{4}$ to $\frac{1}{2}$ inch thick.
Gasometer Plate, Nos. 14 to 17 Wire Gauge.
Boat Plates.
Triangle Molds, cut to dimensions, $\frac{5}{16}$ to $\frac{1}{2}$ inch thick.

SHEET AND PLATE IRON,—DENOMINATED

Chest Plate, Nos. 1 to 7 Wire Gauge.
Lock Plate, Nos 5 to 11 do.
Single Plate, Nos. 12 to 20 do.
Doubles, Nos. 21 to 23 do.
Lattin and Treble, Nos. 24 to 26 do.
Strip Iron, $2\frac{1}{2}$ to 6 inches broad, Nos. 4 to 14 do.
Fender Plate, 4 to 8 inches broad, Nos. 10 to 12 do.
Plow Plate, $2\frac{1}{2}$ to 5 inches broad, $\frac{1}{8}$ to $\frac{3}{16}$ thick, 7 to 8 feet long.
Sliper Iron, 3 to 6 inches broad, Nos. 6 to 12 Wire Gauge; 7 to 8 feet long.

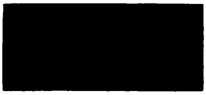
WROUGHT IRON CYLINDRICAL STEAM BOILERS.

Table of Equal Strengths in Cylindrical Boilers from 3 to 8 feet diameter, showing the Thickness of Metal in each respectively, at a Pressure of 450 lbs. to the square inch:—[*]

Diameter of Boilers.		Bursting pressure—equivalent to the ultimate strength of the riveted joint—as deduced from experiment, 34,000 lbs. to the square inch.	Thickness of the Plates in decimal parts of an inch.
Feet.	Inches.		
3	0	450 lbs.	·250
3	6		·291
4	0		·333
4	6		·376
5	0		·416
5	6		·458
6	0		·500
6	6		·541
7	0		·583
7	6		·625
8	0		·666

[*] Mr. Fairbairn.

BIRMINGHAM WIRE GAUGE.

No. of Gauge.		Thickness in Decimals of an Inch.	Weight per Square Foot of Iron.	Weight per Square Foot of Brass.	Weight per Square Foot of Copper.
			lbs.	lbs.	lbs.
0000		·454	18·99	21·11	21·61
000		·425	17·78	19·76	20·53
00		·380	15·89	17·67	18·37
0		·340	14·22	15·81	16·43
1		·300	12·55	13·75	14·50
2		·284	12·00	13·90	13·20
3		·259	11·00	12·10	12·75
4		·238	10·00	11·	11·60
5		·220	8·74	9·61	10·10
6		·203	8·12	8·93	9·40
7		·180	7·5	8·25	8·70
8		·165	6·86	7·54	7·90
9		·148	6·24	6·86	7·20
10		·134	5·62	6·18	6·50

BIRMINGHAM WIRE GAUGE, Continued.

No. of Gauge.		Thickness in Decimals of an Inch.	Weight per Square Foot of Iron.	Weight per Square Foot of Brass.	Weight per Square Foot of Copper.
			lbs.	lbs.	lbs.
11		·120	5·00	5·50	5·80
12		·109	4·36	4·81	5·08
13		·095	3·75	4·12	4·34
14		·083	3·12	3·43	3·60
15		·072	2·82	3·10	3·27
16		·065	2·50	2·75	2·90
17		·058	2·18	2·40	2·52
18		·049	1·86	2·04	2·16
19		·042	1·7	1·87	1·97
20		·035	1·54	1·69	1·78
21		·032	1·40	1·54	1·62
22		·028	1·25	1·37	1·45
23		·025	1·12	1·23	1·30
24		·022	1·00	1·10	1·16
25		·020	·90	·99	1·04
26		·018	·80	·88	·92
27		·016	·72	·79	·83
28		·014	·64	·70	·74
29		·013	·56	·61	·64
30		·012	·50	·55	·58
31		·010	·42	·46	·48
32		·009	·38	·41	·44
33		·008	·34	·37	·39
34		·007	·29	·32	·33
35		·005	·21	·24	·26
36		·004	·17	·18	·19

BIRMINGHAM METAL GAUGE.

No. of Gauge.		Thickness in Decimals of an Inch.	Weight per Square Foot of Iron.	Weight per Square Foot of Brass.	Weight per Square Foot of Copper.
			lbs.	lbs.	lbs.
36	▬	·167	6·71	7·33	7·99
35	▬	·158	6·50	6·65	7·60
34	▬	·148	6·29	6·86	7·20
33	▬	·145	5·76	6·62	7·00
32	▬	·143	5·69	6·53	6·90
31	▬	·138	5·27	6·07	6·42
30	▬	·126	4·98	5·75	6·09
29	▬	·124	4·90	5·68	5·99
28	▬	·120	4·73	5·50	5·80
27	▬	·113	4·40	4·95	5·21
26	▬	·103	3·98	4·49	4·73
25	▬	·095	3·64	4·12	4·34
24	▬	·082	3·39	3·56	3·75
23	▬	·077	3·18	3·34	3·52
22	▬	·074	3·06	3·19	3·37
21	▬	·072	2·97	3·10	3·27
20	▬	·067	2·76	2·86	3·01
19	▬	·064	2·64	2·77	2·81
18	▬	·061	2·45	2 57	2·71
17	▬	·057	2·18	2·35	2·49
16	▬	·051	2·08	2·28	2·42
15	▬	·047	1·91	2·11	2·23
14	▬	·041	1·69	2·02	2·13
13	▬	·036	1·54	1·80	1·90
12	▬	·034	1·45	1·67	1·74
11	▬	·029	1·16	1·41	1·49
10	▬	·024	1·00	1·10	1·16
9	▬	·019	·80	·90	·97
8	▬	·016	·69	·79	·83
7	▬	·015	·63	·72	·78
6	▬	·013	·55	·61	·64
5	▬	·012	·50	·55	·58
4	▬	·010	·42	·46	·48
3	▬	·008	·34	·37	·39
2	▬	·005	·21	·24	·26
1	▬	·004	·17	·18	·19

AREAS AND CIRCUMFERENCES OF CIRCLES,

ADVANCING BY AN EIGHTH, FROM 1 TO 100 INCHES.

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
In.	Inches	Inches.	In.	Inches.	Inches.	In.	Inches.	Inches.
1/16	·0030	·196	5	19·6350	15·708	11	95·0334	34·557
1/8	·0122	·392	1/8	20·6290	16·100	1/8	97·2055	34·950
3/16	·0276	·589	1/4	21·6475	16·493	1/4	99·4021	35·343
1/4	·0490	·785	3/8	22·6907	16·886	3/8	101·623	35·735
5/16	·0767	·981	1/2	23·7583	17·278	1/2	103·869	36·128
3/8	·1104	1·178	5/8	24·8505	17·671	5/8	106·139	36·521
7/16	·1503	1·374	3/4	25·9672	18·064	3/4	108·434	36·913
1/2	·1963	1·570	7/8	27·1085	18·456	7/8	110·753	37·306
9/16	·2485	1·767	6	28·2744	18·849	12	113·097	37·699
5/8	·3068	1·963	1/8	29·4647	19·242	1/8	115·466	38·091
11/16	·3712	2·159	1/4	30·6796	19·635	1/4	117·859	38·484
3/4	·4417	2·356	3/8	31·9192	20·027	3/8	120·276	38·877
13/16	·5185	2·552	1/2	33·1831	20·420	1/2	122·718	39·270
7/8	·6013	2·748	5/8	34·4717	20·813	5/8	125·185	39·662
15/16	·6903	2·945	3/4	35·7847	21·205	3/4	127·676	40·055
			7/8	37·1224	21·598	7/8	130·192	40·448
1	·7854	3·1416	7	38·4846	21·991	13	132·732	40·840
1/8	·9940	3·5343	1/8	39·8713	22·383	1/8	135·297	41·233
1/4	1·2271	3·9270	1/4	41·2825	22·776	1/4	137·886	41·626
3/8	1·4848	4·3197	3/8	42·7184	23·169	3/8	140·500	42·018
1/2	1·7671	4·7124	1/2	44·1787	23·562	1/2	143·139	42·411
5/8	2·0739	5·1051	5/8	45·6636	23·954	5/8	145·802	42·804
3/4	2·4052	5·4978	3/4	47·1730	24·347	3/4	148·489	43·197
7/8	2·7611	5·8905	7/8	48·7070	24·740	7/8	151·201	43·589
2	3·1416	6·2832	8	50·2656	25·132	14	153·938	43·982
1/8	3·5465	6·6759	1/8	51·8486	25·525	1/8	156·699	44·375
1/4	3·9760	7·0686	1/4	53·4562	25·918	1/4	159·485	44·767
3/8	4·4302	7·4613	3/8	55·0885	26·310	3/8	162·295	45·160
1/2	4·9087	7·8540	1/2	56·7451	26·703	1/2	165·130	45·553
5/8	5·4119	8·2467	5/8	58·4264	27·096	5/8	167·989	45·945
3/4	5·9395	8·6394	3/4	60·1321	27·489	3/4	170·873	46·338
7/8	6·4918	9·0321	7/8	61·8625	27·881	7/8	173·782	46·731
3	7·0686	9·4248	9	63·6174	28·274	15	176·715	47·124
1/8	7·6699	9·8175	1/8	65·3968	28·667	1/8	179·672	47·516
1/4	8·2957	10·210	1/4	67·2007	29·059	1/4	182·654	47·909
3/8	8·9462	10·602	3/8	69·0293	29·452	3/8	185·661	48·302
1/2	9·6211	10·995	1/2	70·8823	29·845	1/2	188·692	48·694
5/8	10·3206	11·388	5/8	72·7599	30·237	5/8	191·748	49·087
3/4	11·0446	11·781	3/4	74·6620	30·630	3/4	194·828	49·480
7/8	11·7932	12·173	7/8	76·5887	31·023	7/8	197·933	49·872
4	12·5664	12·566	10	78·5400	31·416	16	201·062	50·265
1/8	13·3640	12·959	1/8	80·5157	31·808	1/8	204·216	50·658
1/4	14·1862	13·351	1/4	82·5160	32·201	1/4	207·394	51·051
3/8	15·0331	13·744	3/8	84·5409	32·594	3/8	210·597	51·443
1/2	15·9043	14·137	1/2	86·5903	32·986	1/2	213·825	51·836
5/8	16·8001	14·529	5/8	88·6643	33·379	5/8	217·077	52·229
3/4	17·7205	14·922	3/4	90·7627	33·772	3/4	220·353	52·621
7/8	18·6655	15·315	7/8	92·8858	34·164	7/8	223·654	53·014

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
In.	Inches.	Inches.	In.	Inches.	Inches.	In.	Inches.	Inches.
17	226·980	53·407	24	452·390	75·398	31	754·769	97·389
⅛	230·330	53·799	⅛	457·115	75·791	⅛	760·868	97·782
¼	233·705	54·192	¼	461·864	76·183	¼	766·992	98·175
⅜	237·104	54·585	⅜	466·638	76·576	⅜	773·140	98·567
½	240·528	54·978	½	471·436	76·969	½	779·313	98·960
⅝	243·977	55·370	⅝	476·259	77·361	⅝	785·510	99·353
¾	247·450	55·763	¾	481·106	77·754	¾	791·732	99·745
⅞	250·947	56·156	⅞	485·978	78·147	⅞	797·978	100·13
18	254·469	56·548	25	490·875	78·540	32	804·249	100·53
⅛	258·016	56·941	⅛	495·796	78·932	⅛	810 545	100·92
¼	261·587	57·334	¼	500·741	79·325	¼	816·865	101·31
⅜	265·182	57·726	⅜	505·711	79·718	⅜	823·209	101·70
½	268·803	58·119	½	510·706	80·110	½	829·578	102·10
⅝	272·447	58·512	⅝	515·725	80·503	⅝	835·972	102·49
¾	276·117	58·905	¾	520·769	80·896	¾	842·390	102·88
⅞	279·811	59·297	⅞	525·837	81·288	⅞	848·833	103·28
19	283·529	59·690	26	530·930	81·681	33	855·300	103·67
⅛	287·272	60·083	⅛	536·047	82·074	⅛	861·792	104·06
¼	291·039	60·475	¼	541·189	82·467	¼	868·308	104·45
⅜	294·831	60·868	⅜	546·356	82·859	⅜	874·849	104·85
½	298·648	61·261	½	551·547	83·252	½	881·415	105·24
⅝	302·489	61·653	⅝	556·762	83·645	⅝	888·005	105·63
¾	306·355	62·046	¾	562·002	84·037	¾	894·619	106·02
⅞	310·245	62·439	⅞	567·267	84·430	⅞	901·258	106·42
20	314·160	62·832	27	572·556	84·823	34	907·922	106·81
⅛	318·099	63·224	⅛	577·870	85·215	⅛	914·610	107·20
¼	322·063	63·617	¼	583·208	85·608	¼	921·323	107·59
⅜	326·051	64·010	⅜	588·571	86·001	⅜	928·060	107·99
½	330·064	64·402	½	593·958	86·394	½	934·822	108·38
⅝	334·101	64·795	⅝	599·370	86·786	⅝	941·608	108·77
¾	338·163	65·188	¾	604·807	87·179	¾	948·419	109·17
⅞	342·250	65·580	⅞	610·268	87·572	⅞	955·255	109·56
21	346·361	65·973	28	615·753	87·964	35	962·115	109·95
⅛	350·497	66·366	⅛	621·263	88·357	⅛	968·999	110·34
¼	354·657	66·759	¼	626·798	88·750	¼	975·908	110·74
⅜	358·841	67·151	⅜	632·357	89·142	⅜	982·842	111·13
½	363·051	67·544	½	637·941	89·535	½	989·800	111·52
⅝	367·284	67·937	⅝	643·549	89·928	⅝	996·783	111·91
¾	371·543	68 329	¾	649·182	90·321	¾	1003·79	112·31
⅞	375·826	68·722	⅞	654·839	90·713	⅞	1010·82	112·70
22	380·133	69·115	29	660·521	91·106	36	1017·87	113·09
⅛	384·465	69·507	⅛	666·227	91·499	⅛	1024·95	113·49
¼	388·822	69·900	¼	671·958	91·891	¼	1032·06	113·88
⅜	393·203	70·293	⅜	677·714	92·284	⅜	1039·19	114·27
½	397·608	70·686	½	683·494	92·677	½	1046·34	114·66
⅝	402·038	71·078	⅝	689·298	93·069	⅝	1053·52	115·06
¾	406·493	71·471	¾	695·128	93·462	¾	1060·73	115·45
⅞	410·972	71·864	⅞	700·981	93·855	⅞	1067·95	115·84
23	415·476	72·256	30	706·860	94·248	37	1075·21	116·23
⅛	420·004	72·649	⅛	712·762	94·640	⅛	1082·48	116·63
¼	424·557	73·042	¼	718·690	95·033	¼	1089·79	117·02
⅜	429·135	73·434	⅜	724·641	95·426	⅜	1097·11	117·41
½	433·737	73·827	½	730·618	95·818	½	1104·46	117·81
⅝	438·863	74·220	⅝	736·619	96·211	⅝	1111·84	118·20
¾	443·014	74·613	¾	742·644	96·604	¾	1119·24	118·59
⅞	447·690	75·005	⅞	748·694	96·996	⅞	1126·66	118·98

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
In.	Inches.	Inches.	In.	Inches.	Inches.	In.	Inches.	Inches.
38	1134·11	119·38	45	1590·43	141·37	52	2123·72	163·36
⅛	1141·59	119·77	⅛	1599·28	141·76	⅛	2133·94	163·75
¼	1149·08	120·16	¼	1608·15	142·15	¼	2144·19	164·14
⅜	1156·61	120·55	⅜	1617·04	142·55	⅜	2154·46	164·54
½	1164·15	120·95	½	1625·97	142·94	½	2164·75	164·93
⅝	1171·73	121·34	⅝	1634·92	143·33	⅝	2175·07	165·32
¾	1179·32	121·73	¾	1643·89	143·72	¾	2185·42	165·71
⅞	1186·94	122·12	⅞	1652·88	144·12	⅞	2195·79	166·11
39	1194·59	122·52	46	1661·90	144·51	53	2206·18	166·50
⅛	1202·26	122·91	⅛	1670·95	144·90	⅛	2216·60	166·89
¼	1209·95	123·30	¼	1680·01	145·29	¼	2227·05	167·29
⅜	1217·67	123·70	⅜	1689·10	145·69	⅜	2237·51	167·68
½	1225·42	124·09	½	1698·23	146·08	½	2248·01	168·07
⅝	1233·18	124·48	⅝	1707·37	146·47	⅝	2258·52	168·46
¾	1240·98	124·87	¾	1716·54	146·86	¾	2269·06	168·86
⅞	1248·79	125·27	⅞	1725·73	147·26	⅞	2279·63	169·25
40	1256·64	125·66	47	1734·94	147·65	54	2290·22	169·64
⅛	1264·50	126·05	⅛	1744·18	148·04	⅛	2300·84	170·03
¼	1272·39	126·44	¼	1753·45	148·44	¼	2311·48	170·43
⅜	1280·31	126·84	⅜	1762·73	148·83	⅜	2322·14	170·82
½	1288·25	127·23	½	1772·05	149·22	½	2332·83	171·21
⅝	1296·21	127·62	⅝	1781·39	149·61	⅝	2343·54	171·60
¾	1304·20	128·02	¾	1790·76	150·01	¾	2354·28	172·00
⅞	1312·21	128·41	⅞	1800·14	150·40	⅞	2365·04	172·39
41	1320·25	128·80	48	1809·56	150·79	55	2375·83	172·78
⅛	1328·32	129·19	⅛	1818·99	151·18	⅛	2386·64	173·18
¼	1336·40	129·59	¼	1828·46	151·58	¼	2397·48	173·57
⅜	1344·51	129·98	⅜	1837·93	151·97	⅜	2408·34	173·96
½	1352·65	130·37	½	1847·45	152·36	½	2419·22	174·35
⅝	1360·81	130·76	⅝	1856·99	152·76	⅝	2430·18	174·75
¾	1369·00	131·16	¾	1866·55	153·15	¾	2441·07	175·14
⅞	1377·21	131·55	⅞	1876·13	153·54	⅞	2452·03	175·53
42	1385·44	131·94	49	1885·74	153·93	56	2463·01	175·92
⅛	1393·70	132·33	⅛	1895·37	154·33	⅛	2474·02	176·32
¼	1401·98	132·73	¼	1905·03	154·72	¼	2485·05	176·71
⅜	1410·29	133·12	⅜	1914·70	155·11	⅜	2496·11	177·10
½	1418·62	133·51	½	1924·42	155·50	½	2507·19	177·50
⅝	1426·98	133·91	⅝	1934·15	155·90	⅝	2518·29	177·89
¾	1435·36	134·30	¾	1943·91	156·29	¾	2529·42	178·28
⅞	1443·77	134·69	⅞	1953·69	156·68	⅞	2540·58	178·67
43	1452·20	135·08	50	1963·50	157·08	57	2551·76	179·07
⅛	1460·65	135·48	⅛	1973·32	157·47	⅛	2562·96	179·46
¼	1469·13	135·87	¼	1983·18	157·86	¼	2574·19	179·85
⅜	1477·63	136·26	⅜	1993·05	158·25	⅜	2585·45	180·24
½	1486·17	136·65	½	2002·96	158·65	½	2596·72	180·64
⅝	1494·72	137·05	⅝	2012·89	159·04	⅝	2608·03	181·03
¾	1503·30	137·44	¾	2022·84	159·43	¾	2619·35	181·42
⅞	1511·90	137·83	⅞	2032·82	159·82	⅞	2630·70	181·82
44	1520·53	138·23	51	2042·82	160·22	58	2642·08	182·21
⅛	1529·18	138·62	⅛	2052·85	160·61	⅛	2653·48	182·60
¼	1537·86	139·01	¼	2062·90	161·00	¼	2664·91	182·99
⅜	1546·55	139·40	⅜	2072·96	161·39	⅜	2676·36	183·39
½	1555·28	139·80	½	2083·07	161·79	½	2687·83	183·78
⅝	1564·03	140·19	⅝	2093·20	162·18	⅝	2699·33	184·17
¾	1572·81	140·58	¾	2103·35	162·57	¾	2710·85	184·56
⅞	1581·61	140·97	⅞	2113·52	162·97	⅞	2722·40	184·96

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
In.	Inches.	Inches.	In.	Inches.	Inches.	In.	Inches.	Inches.
59	2733·97	185·35	66	3421·20	207·34	73	4185·39	229·33
⅛	2745·57	185·74	⅛	3434·17	207·73	⅛	4199·74	229·72
¼	2757·19	186·13	¼	3447·16	208·13	¼	4214·11	230·12
⅜	2768·84	186·53	⅜	3460·19	208·52	⅜	4228·50	230·51
½	2780·51	186·92	½	3473·23	208·91	½	4242·92	230·90
⅝	2792·20	187·31	⅝	3486·30	209·30	⅝	4257·37	231·30
¾	2803·92	187·71	¾	3499·39	209·70	¾	4271·83	231·69
⅞	2815·67	188·10	⅞	3512·51	210·09	⅞	4286·33	232·08
60	2827·44	188·49	67	3525·66	210·48	74	4300·85	232·47
⅛	2839·23	188·88	⅛	3538·82	210·87	⅛	4315·39	232·87
¼	2851·05	189·28	¼	3552·01	211·27	¼	4329·95	233·26
⅜	2862·89	189·67	⅜	3565·23	211·66	⅜	4344·55	233·65
½	2874·76	190·06	½	3578·47	212·05	½	4359·16	234·04
⅝	2886·65	190·45	⅝	3591·74	212·45	⅝	4373·80	234·44
¾	2898·56	190·85	¾	3605·03	212·84	¾	4388·47	234·83
⅞	2910·50	191·24	⅞	3618·35	213·23	⅞	4403·16	235·22
61	2922·47	191·63	68	3631·68	213·62	75	4417·87	235·62
⅛	2934·46	192·03	⅛	3645·05	214·02	⅛	4432·61	236·01
¼	2946·47	192·42	¼	3658·44	214·41	¼	4447·37	236·40
⅜	2958·51	192·81	⅜	3671·85	214·80	⅜	4462·16	236·79
½	2970·57	193·20	½	3685·29	215·19	½	4476·97	237·19
⅝	2982·66	193·60	⅝	3698·75	215·59	⅝	4491·81	237·58
¾	2994·77	193·99	¾	3712·24	215·98	¾	4506·67	237·97
⅞	3006·91	194·38	⅞	3725·75	216·37	⅞	4521·56	238·36
62	3019·07	194·77	69	3739·28	216·77	76	4536·47	238·76
⅛	3031·26	195·17	⅛	3752·84	217·16	⅛	4551·40	239·15
¼	3043·47	195·56	¼	3766·43	217·55	¼	4566·36	239·54
⅜	3055·70	195·95	⅜	3780·04	217·94	⅜	4581·34	239·93
½	3067·96	196·35	½	3793·67	218·34	½	4596·35	240·33
⅝	3080·25	196·74	⅝	3807·33	218·73	⅝	4611·39	240·72
¾	3092·56	197·13	¾	3821·02	219·12	¾	4626·44	241·11
⅞	3104·89	197·52	⅞	3834·72	219·51	⅞	4641·52	241·51
63	3117·25	197·92	70	3848·46	219·91	77	4656·63	241·90
⅛	3129·63	198·31	⅛	3862·21	220·30	⅛	4671·76	242·29
¼	3142·04	198·70	¼	3875·99	220·69	¼	4686·92	242·68
⅜	3154·47	199·09	⅜	3889·80	221·09	⅜	4702·10	243·08
½	3166·92	199·49	½	3903·63	221·48	½	4717·30	243·47
⅝	3179·40	199·88	⅝	3917·48	221·87	⅝	4732·53	243·86
¾	3191·91	200·27	¾	3931·36	222·26	¾	4747·79	244·25
⅞	3204·44	200·66	⅞	3945·27	222·66	⅞	4763·07	244·65
64	3216·99	201·06	71	3959·20	223·05	78	4778·37	245·04
⅛	3229·57	201·45	⅛	3973·15	223·44	⅛	4793·70	245·43
¼	3242·17	201·84	¼	3987·13	223·83	¼	4809·05	245·83
⅜	3254·80	202·24	⅜	4001·13	224·23	⅜	4824·42	246·22
½	3267·46	202·63	½	4015·16	224·62	½	4839·83	246·61
⅝	3280·13	203·02	⅝	4029·21	225·01	⅝	4855·25	247·00
¾	3292·83	203·41	¾	4043·28	225·40	¾	4870·70	247·40
⅞	3305·56	203·81	⅞	4057·38	225·80	⅞	4886·18	247·79
65	3318·31	204·20	72	4071·51	226·19	79	4901·68	248·18
⅛	3331·09	204·59	⅛	4085·66	226·58	⅛	4917·20	248·57
¼	3343·88	204·98	¼	4099·83	226·98	¼	4932·75	248·97
⅜	3356·71	205·38	⅜	4114·03	227·37	⅜	4948·32	249·36
½	3369·56	205·77	½	4128·25	227·76	½	4963·92	249·75
⅝	3382·43	206·16	⅝	4142·50	228·15	⅝	4979·54	250·14
¾	3395·33	206·56	¾	4156·77	228·55	¾	4995·19	250·54
⅞	3408·25	206·95	⅞	4171·07	228·94	⅞	5010·86	250·93

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
In.	Inches	Inches.	In.	Inches.	Inches.	In.	Inches.	Inches.
80	5026·56	251·32	87	5944·69	273·31	94	6939·79	295·31
⅛	5042·28	251·72	⅛	5961·78	273·71	⅛	6958·26	295·70
¼	5058·02	252·11	¼	5978·90	274·10	¼	6976·75	296·09
⅜	5073·79	252·50	⅜	5996·05	274·49	⅜	6995·27	296·48
½	5089·58	252·89	½	6013·21	274·89	½	7013·81	296·88
⅝	5105·40	253·29	⅝	6030·41	275·28	⅝	7032·38	297·27
¾	5121·24	253·68	¾	6047·62	275·67	¾	7050·97	297·66
⅞	5137·11	254·07	⅞	6064·87	276·06	⅞	7069·59	298·05
81	5153·00	254·46	88	6082·13	276·46	95	7088·23	298·45
⅛	5168·92	254·86	⅛	6099·42	276·85	⅛	7106·90	298·84
¼	5184·86	255·25	¼	6116·74	277·24	¼	7125·58	299·23
⅜	5200·83	255·64	⅜	6134·08	277·63	⅜	7144·30	299·63
½	5216·82	256·04	½	6151·44	278·03	½	7163·04	300·02
⅝	5232·83	256·43	⅝	6168·83	278·42	⅝	7181·80	300·41
¾	5248·87	256·82	¾	6186·25	278·81	¾	7200·59	300·80
⅞	5264·94	257·21	⅞	6203·69	279·20	⅞	7219·40	301·20
82	5281·02	257·61	89	6221·15	279·60	96	7238·24	301·59
⅛	5297·14	258·00	⅛	6238·64	279·99	⅛	7257·10	301·98
¼	5313·27	258·38	¼	6256·15	280·38	¼	7275·99	302·37
⅜	5329·44	258·79	⅜	6273·68	280·78	⅜	7294·90	302·77
½	5345·62	259·18	½	6291·25	281·17	½	7313·84	303·16
⅝	5361·83	259·57	⅝	6308·83	281·56	⅝	7332·80	303·55
¾	5378·07	259·96	¾	6326·44	281·95	¾	7351·78	303·94
⅞	5394·33	260·36	⅞	6344·08	282·35	⅞	7370·79	304·34
83	5410·62	260·75	90	6361·74	282·74	97	7389·82	304·73
⅛	5426·92	261·14	⅛	6379·42	283·13	⅛	7408·88	305·12
¼	5443·26	261·53	¼	6397·13	283·52	¼	7427·96	305·52
⅜	5459·62	261·93	⅜	6414·86	283·92	⅜	7447·07	305·91
½	5476·00	262·32	½	6432·62	284·31	½	7466·20	306·30
⅝	5492·41	262·71	⅝	6450·40	284·70	⅝	7485·36	306·69
¾	5508·84	263·10	¾	6468·21	285·10	¾	7504·54	307·09
⅞	5525·30	263·50	⅞	6486·04	285·49	⅞	7523·75	307·48
84	5541·78	263·89	91	6503·89	285·88	98	7542·98	307·87
⅛	5558·28	264·28	⅛	6521·77	286·27	⅛	7562·23	308·26
¼	5574·81	264·67	¼	6539·68	286·67	¼	7581·51	308·66
⅜	5591·37	265·07	⅜	6557·61	287·06	⅜	7600·81	309·05
½	5607·95	265·46	½	6575·56	287·45	½	7620·14	309·44
⅝	5624·55	265·85	⅝	6593·54	287·84	⅝	7639·49	309·84
¾	5641·18	266·25	¾	6611·54	288·24	¾	7658·87	310·22
⅞	5657·83	266·64	⅞	6629·57	288·63	⅞	7678·27	310·62
85	5674·51	267·03	92	6647·62	289·02	99	7697·70	311·01
⅛	5691·21	267·42	⅛	6665·70	289·41	⅛	7717·15	311·41
¼	5707·94	267·82	¼	6683·80	289·81	¼	7736·62	311·80
⅜	5724·69	268·21	⅜	6701·92	290·20	⅜	7756·13	312·19
½	5741·47	268·60	½	6720·07	290·59	½	7775·65	312·58
⅝	5758·26	268·99	⅝	6738·25	290·99	⅝	7795·20	312·98
¾	5775·09	269·39	¾	6756·45	291·38	¾	7814·77	313·37
⅞	5791·94	269·78	⅞	6774·67	291·77	⅞	7834·37	313·76
86	5808·81	270·17	93	6792·92	292·16	100	7854·00	314·16
⅛	5825·71	270·57	⅛	6811·19	292·56			
¼	5842·63	270·96	¼	6829·49	292·95			
⅜	5859·58	271·35	⅜	6847·81	293·34			
½	5876·55	271·74	½	6866·16	293·73			
⅝	5893·55	272·14	⅝	6884·53	294·13			
¾	5910·57	272·53	¾	6902·92	294·52			
⅞	5927·62	272·92	⅞	6921·34	294·91			

AREAS AND CIRCUMFERENCES OF CIRCLES,

ADVANCING BY AN INCH, FROM 1 TO 50 FEET.

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
1 *ft.*	·7854	3·1416	5 *ft.*	19·6350	15·7080	9 *ft.*	63·6174	28·2744
1	·9217	3·4034	1	20·2947	15·9698	1	64·8006	28·5362
2	1·0690	3·6652	2	20·9656	16·2316	2	65·9951	28·7980
3	1·2271	3·9270	3	21·6475	16·4934	3	67·2007	29·0598
4	1·3962	4·1888	4	22·3400	16·7552	4	68·4166	29·3216
5	1·5761	4·4506	5	23·0437	17·0170	5	69·6440	29·5834
6	1·7671	4·7124	6	23·7583	17·2788	6	70·8823	29·8452
7	1·9689	4·9742	7	24·4835	17·5406	7	72·1309	30·1070
8	2·1816	5·2360	8	25·2199	17·8024	8	73·3910	30·3688
9	2·4052	5·4978	9	25·9672	18·0642	9	74·6620	30·6306
10	2·6398	5·7596	10	26·7251	18·3260	10	75·9433	30·8924
11	2·8852	6·0214	11	27·4943	18·5878	11	77·2362	31·1542
2 *ft.*	3·1416	6·2832	6 *ft.*	28·2744	18·8496	10 *ft*	78·5400	31·4160
1	3·4087	6·5450	1	29·0649	19·1114	1	79·8540	31·6778
2	3·6869	6·8068	2	29·8668	19·3732	2	81·1795	31·9396
3	3·9760	7·0686	3	30·6796	19·6350	3	82·5160	32·2014
4	4·2760	7·3304	4	31·5029	19·8968	4	83·8627	32·4632
5	4·5869	7·5922	5	32·3376	20·1586	5	85·2211	32·7250
6	4·9087	7·8540	6	33·1831	20·4204	6	86·5903	32·9868
7	5·2413	8·1158	7	34·0391	20·6822	7	87·9697	33·2486
8	5·5850	8·3776	8	34·9065	20·9440	8	89·3608	33·5104
9	5·9395	8·6394	9	35·7847	21·2058	9	90·7627	33·7722
10	6·3049	8·9012	10	36·6735	21·4676	10	92·1749	34·0340
11	6·6813	9·1630	11	37·5736	21·7294	11	93·5986	34·2958
3 *ft.*	7·0686	9·4248	7 *ft.*	38·4846	21·9912	11 *ft*	95·0334	34·5576
1	7·4666	9·6866	1	39·4060	22·2530	1	96·4783	34·8194
2	7·8757	9·9484	2	40·3388	22·5148	2	97·9347	35·0812
3	8·2957	10·2102	3	41·2825	22·7766	3	99·4021	35·3430
4	8·7265	10·4720	4	42·2367	23·0384	4	100·8797	35·6048
5	9·1683	10·7338	5	43·2022	23·3002	5	102·3689	35·8666
6	9·6211	10·9956	6	44·1787	23·5620	6	103·8691	36·1284
7	10·0846	11·2574	7	45·1656	23·8238	7	105·3794	36·3902
8	10·5591	11·5192	8	46·1638	24·0856	8	106·9013	36·6520
9	11·0446	11·7810	9	47·1730	24·3474	9	108·4342	36·9138
10	11·5409	12·0428	10	48·1926	24·6092	10	109·9772	37·1756
11	12·0481	12·3046	11	49·2236	24·8710	11	111·5319	37·4374
4 *ft.*	12·5664	12·5664	8 *ft.*	50·2656	25·1328	12 *ft*	113·0976	37·6992
1	13·0952	12·8282	1	51·3178	25·3946	1	114·6732	37·9610
2	13·6353	13·0900	2	52·3816	25·6564	2	116·2607	38·2228
3	14·1862	13·3518	3	53·4562	25·9182	3	117·8590	38·4846
4	14·7479	13·6136	4	54·5412	26·1800	4	119·4674	38·7464
5	15·3206	13·8754	5	55·6377	26·4418	5	121·0876	39·0082
6	15·9043	14·1372	6	56·7451	26·7036	6	122·7187	39·2700
7	16·4986	14·3990	7	57·8628	26·9654	7	124·3598	39·5318
8	17·1041	14·6608	8	58·9920	27·2272	8	126·0127	39·7936
9	17·7205	14·9226	9	60·1321	27·4890	9	127·6765	40·0554
10	18·3476	15·1844	10	61·2826	27·7508	10	129·3504	40·3172
11	18·9858	15·4462	11	62·4445	28·0126	11	131·0360	40·5790

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
13 *ft*	132·7326	40·8408	18 *ft*	254·4696	56·5488	23 *ft*	415·4766	72·2568
1	134·4391	41·1026	1	256·8303	56·8106	1	418·4915	72·5186
2	136·1574	41·3644	2	259·2033	57·0724	2	421·5192	72·7804
3	137·8867	41·6262	3	261·5872	57·3342	3	424·5577	73·0422
4	139·6260	41·8880	4	263·9807	57·5960	4	427·6055	73·3040
5	141·3771	42·1498	5	266·3864	57·8578	5	430·6658	73·5658
6	143·1391	42·4116	6	268·8031	58·1196	6	433·7371	73·8276
7	144·9111	42·6734	7	271·2293	58·3814	7	436·8175	74·0894
8	146·6949	42·9352	8	273·6678	58·6432	8	439·9106	74·3512
9	148·4896	43·1970	9	276·1171	58·9050	9	443·0146	74·6130
10	150·2943	43·4588	10	278·5761	59·1668	10	446·1278	74·8748
11	152·1109	43·7206	11	281·0472	59·4286	11	449·2536	75·1366
14 *ft*	153·9384	43·9824	19 *ft*	283·5294	59·6904	24 *ft*	452·3904	75·3984
1	155·7758	44·2442	1	286·0210	59·9522	1	455·5362	75·6602
2	157·6250	44·5060	2	288·5249	60·2140	2	458·6948	75·9220
3	159·4852	44·7678	3	291·0397	60·4758	3	461·8642	76·1838
4	161·3553	45·0296	4	293·5641	60·7376	4	465·0428	76·4456
5	163·2373	45·2914	5	296·1007	60·9994	5	468·2341	76·7074
6	165·1303	45·5532	6	298·6483	61·2612	6	471·4363	76·9692
7	167·0331	45·8150	7	301·2054	61·5230	7	474·6476	77·2310
8	168·9479	46·0768	8	303·7747	61·7848	8	477·8716	77·4928
9	170·8735	46·3386	9	306·3550	62·0466	9	481·1065	77·7546
10	172·8091	46·6004	10	308·9448	62·3084	10	484·3506	78·0164
11	174·7565	46·8622	11	311·5469	62·5702	11	487·6073	78·2782
15 *ft*	176·7150	47·1240	20 *ft*	314·1600	62·8320	25 *ft*	490·8750	78·5400
1	178·6832	47·3858	1	316·7824	63·0938	1	494·1516	78·8018
2	180·6634	47·6476	2	319·4173	63·3556	2	497·4411	79·0636
3	182·6545	47·9094	3	322·0630	63·6174	3	500·7415	79·3254
4	184·6555	48·1712	4	324·7182	63·8792	4	504·0510	79·5872
5	186·6684	48·4330	5	327·3858	64·1410	5	507·3732	79·8490
6	188·6923	48·6948	6	330·0643	64·4028	6	510·7063	80·1108
7	190·7260	48·9566	7	332·7522	64·6646	7	514·0484	80·3726
8	192·7716	49·2184	8	335·4525	64·9264	8	517·4034	80·6344
9	194·8282	49·4802	9	338·1637	65·1882	9	520·7692	80·8962
10	196·8946	49·7420	10	340·8844	65·4500	10	524·1441	81·1580
11	198·9730	50·0038	11	343·6174	65·7118	11	527·5318	81·4198
16 *ft*	201·0624	50·2656	21 *ft*	346·3614	65·9736	26 *ft*	530·9304	81·6816
1	203·1615	50·5274	1	349·1147	66·2354	1	534·3379	81·9434
2	205·2726	50·7892	2	351·8804	66·4972	2	537·7583	82·2052
3	207·3946	51·0510	3	354·6571	66·7590	3	541·1896	82·4670
4	209·5264	51·3128	4	357·4432	67·0208	4	544·6299	82·7288
5	211·6703	51·5746	5	360·2417	67·2826	5	548·0830	82·9906
6	213·8251	51·8364	6	363·0511	67·5444	6	551·5471	83·2524
7	215·9896	52·0982	7	365·8698	67·8062	7	555·0201	83·5142
8	218·1662	52·3600	8	368·7011	68·0680	8	558·5059	83·7760
9	220·3537	52·6218	9	371·5432	68·3298	9	562·0027	84·0378
10	222·5510	52·8836	10	374·3947	68·5916	10	565·5084	84·2996
11	224·7603	53·1454	11	377·2587	68·8534	11	569·0270	84·5614
17 *ft*	226·9806	53·4072	22 *ft*	380·1336	69·1152	27 *ft*	572·5566	84·8232
1	229·2105	53·6690	1	383·0177	69·3770	1	576·0949	85·0850
2	231·4525	53·9308	2	385·9144	69·6388	2	579·6463	85·3468
3	233·7055	54·1926	3	388·8220	69·9006	3	583·2085	85·6086
4	235·9682	54·4544	4	391·7389	70·1624	4	586·7796	85·8704
5	238·2430	54·7162	5	394·6683	70·4242	5	590·3637	86·1322
6	240·5287	54·9780	6	397·6087	70·6860	6	593·9587	86·3940
7	242·8241	55·2398	7	400·5583	70·9478	7	597·5625	86·6558
8	245·1316	55·5016	8	403·5204	71·2096	8	601·1793	86·9176
9	247·4500	55·7634	9	406·4935	71·4714	9	604·8070	87·1794
10	249·7781	56·0252	10	409·4759	71·7332	10	608·4436	87·4412
11	252·1184	56·2870	11	412·4707	71·9950	11	612·0931	87·7030

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
28 *ft*	615·7536	87·9648	33 *ft*	855·3006	103·6728	38 *ft*	1134·1176	119·3808
1	619·4228	88·2266	1	859·6240	103·9346	1	1139·0953	119·6426
2	623·1050	88·4884	2	863·9609	104·1964	2	1144·0868	119·9044
3	626·7982	88·7502	3	868·3087	104·4582	3	1149·0892	120·1662
4	630·5002	89·0120	4	872·6649	104·7200	4	1154·0997	120·4280
5	634·2152	89·2738	5	877·0346	104·9818	5	1159·1239	120·6898
6	637·9411	89·5356	6	881·4151	105·2436	6	1164·1591	120·9516
7	641·6758	89·7974	7	885·8040	105·5054	7	1169·2023	121·2134
8	645·4235	90·0592	8	890·2064	105·7672	8	1174·2592	121·4752
9	649·1821	90·3210	9	894·6196	106·0290	9	1179·3271	121·7370
10	652·9495	90·5828	10	899·0413	106·2908	10	1184·4030	121·9988
11	656·7300	90·8446	11	903·4763	106·5526	11	1189·4927	122·2606
29 *ft*	660·5214	91·1064	34 *ft*	907·9224	106·8144	39 *ft*	1194·5934	122·5224
1	664·3214	91·3682	1	912·3767	107·0762	1	1199·7195	122·7842
2	668·1346	91·6300	2	916·8445	107·3380	2	1204·8244	123·0460
3	671·9587	91·8918	3	921·3232	107·5998	3	1209·9577	123·3078
4	675·7915	92·1536	4	925·8103	107·8616	4	1215·0990	123·5696
5	679·6375	92·4154	5	930·3108	108·1234	5	1220·2542	123·8314
6	683·4943	92·6772	6	934·8223	108·3852	6	1225·4203	124·0932
7	687·3598	92·9390	7	939·3421	108·6470	7	1230·5943	124·3550
8	691·2385	93·2008	8	943·8753	108·9088	8	1235·7822	124·6168
9	695·1280	93·4626	9	948·4195	109·1706	9	1240·9810	124·8786
10	699·0263	93·7244	10	952·9720	109·4324	10	1246·1878	125·1404
11	702·9377	93·9862	11	957·5380	109·6942	11	1251·4084	125·4022
30 *ft*	706·8600	94·2480	35 *ft*	962·1150	109·9560	40 *ft*	1256·6400	125·6640
1	710·7909	94·5098	1	966·7001	110·2178	1	1261·8794	125·9258
2	714·7350	94·7716	2	971·2989	110·4796	2	1267·1327	126·1876
3	718·6900	95·0334	3	975·9085	110·7414	3	1272·3970	126·4494
4	722·6537	95·2952	4	980·5264	111·0032	4	1277·6692	126·7112
5	726·6305	95·5570	5	985·1579	111·2650	5	1282·9553	126·9730
6	730·6183	95·8186	6	989·8003	111·5268	6	1288·2523	127·2348
7	734·6147	96·0806	7	994·4509	111·7886	7	1293·5572	127·4966
8	738·6242	96·3424	8	999·1151	112·0504	8	1298·8760	127·7584
9	742·6447	96·6042	9	1003·7902	112·3122	9	1304·2057	128·0202
10	746·6738	96·8660	10	1008·4736	112·5740	10	1309·5433	128·2820
11	750·7161	97·1278	11	1013·1705	112·8358	11	1314·8949	128·5438
31 *ft*	754·7694	97·3896	36 *ft*	1017·8784	113·0976	41 *ft*	1320·2574	128·8056
1	758·8311	97·6514	1	1022·5944	113·3594	1	1325·6276	129·0674
2	762·9062	97·9132	2	1027·3240	113·6212	2	1331·0119	129·3292
3	766·9921	98·1750	3	1032·0646	113·8830	3	1336·4071	129·5910
4	771·0866	98·4368	4	1036·8134	114·1448	4	1341·8101	129·8528
5	775·1944	98·6986	5	1041·5758	114·4066	5	1347·2271	130·1146
6	779·3131	98·9604	6	1046·3491	114·6684	6	1352·6551	130·3764
7	783·4403	99·2222	7	1051·1306	114·9302	7	1358·0908	130·6382
8	787·5808	99·4840	8	1055·9257	115·1920	8	1363·5406	130·9000
9	791·7322	99·7458	9	1060·7317	115·4538	9	1369·0012	131·1618
10	795·8922	100·0076	10	1065·5459	115·7756	10	1374·4697	131·4236
11	800·0654	100·2694	11	1070·3738	115·9774	11	1379·9521	131·6854
32 *ft*	804·2496	100·5312	37 *ft*	1075·2126	116·2392	42 *ft*	1385·4456	131·9472
1	808·4422	100·7930	1	1080·0594	116·5010	1	1390·2467	132·2090
2	812·6481	101·0548	2	1084·9201	116·7628	2	1396·4619	132·4708
3	816·8650	101·3166	3	1089·7915	117·0246	3	1401·9880	132·7326
4	821·0904	101·5784	4	1094·6711	117·2864	4	1407·5219	132·9944
5	825·3291	101·8402	5	1099·5644	117·5482	5	1413·0698	133·2562
6	829·5787	102·1020	6	1104·4687	117·8100	6	1418·6287	133·5180
7	833·8368	102·3638	7	1109·3810	118·0718	7	1424·1952	133·7798
8	838·1082	102·6256	8	1114·3071	118·3336	8	1429·7759	134·0416
9	842·3905	102·8874	9	1119·2440	118·5954	9	1435·3675	134·3034
10	846·6813	103·1492	10	1124·1891	118·8572	10	1440·9668	134·5652
11	850·9855	103·4110	11	1129·1478	119·1190	11	1446·5802	134·8270

Dia.	Area.	Circum.	Dia.	Area.	Circum.	Dia.	Area.	Circum.
43 *ft*	1452·2046	135·0888	6	1625·9743	142·9428	48 *ft*	1809·5616	150·7968
1	1457·8365	135·3506	7	1631·9334	143·2046	1	1815·8477	151·0586
2	1463·4827	135·6124	8	1637·9068	143·4664	2	1822·1485	151·3204
3	1469·1397	135·8742	9	1643·8912	143·7282	3	1828·4602	151·5822
4	1474·8044	136·1360	10	1649·8831	143·9900	4	1834·7791	151·8440
5	1480·4833	136·3978	11	1655·8892	144·2518	5	1841·1127	152·1058
6	1486·1731	136·6596	46 *ft*	1661·9064	144·5136	6	1847·4571	152·3676
7	1491·8705	136·9214	1	1667·9308	144·7754	7	1853·8087	152·6294
8	1497·5821	137·1832	2	1673·9698	145·0372	8	1860·1750	152·8912
9	1503·3046	137·4450	3	1680·0196	145·2990	9	1866·5521	153·1530
10	1509·0348	137·7068	4	1686·0769	145·5608	10	1872·9365	153·4148
11	1514·7791	137·9686	5	1692·1485	145·8226	11	1879·3355	153·6766
44 *ft*	1520·5344	138·2304	6	1698·2311	146·0844	49 *ft*	1885·7454	153·9384
1	1526·2971	138·4922	7	1704·3210	146·3462	1	1892·1724	154·2002
2	1532·0742	138·7540	8	1710·4254	146·6080	2	1898·5041	154·4620
3	1537·8622	139·0158	9	1716·5407	146·8698	3	1905·0367	154·7238
4	1543·6578	139·2776	10	1722·6634	147·1316	4	1911·4965	154·9856
5	1549·4676	139·5394	11	1728·8005	147·3934	5	1917·9609	155·2474
6	1555·2883	139·8012	47 *ft*	1734·9486	147·6552	6	1924·4263	155·5092
7	1561·1165	140·0630	1	1741·1039	147·9170	7	1930·9188	155·7710
8	1566·9591	140·3248	2	1747·2738	148·1788	8	1937·3159	156·0328
9	1572·8125	140·5866	3	1753·4545	148·4406	9	1943·9140	156·2946
10	1578·6735	140·8484	4	1759·6426	148·7024	10	1950·4392	156·5564
11	1584·5488	141·1102	5	1765·8452	148·9642	11	1956·9691	156·8182
45 *ft*	1590·4350	141·3720	6	1772·0587	149·2260	50 *ft*	1963·5000	157·0800
1	1596·3286	141·6338	7	1778·2795	149·4878			
2	1602·2366	141·8956	8	1784·5148	149·7496			
3	1608·1555	142·1574	9	1790·7610	150·0114			
4	1614·0819	142·4192	10	1797·0145	150·2732			
5	1620·0226	142·6810	11	1803·2826	150·5350			

DIVISIONS OF DIFFERENT THERMOMETERS.

	FAHRENHEIT.		CENTIG.		REAUM.		DE LISLE.
Boiling point	212°		100°		80°		0°
Freezing point	32		0		0		150
Thus, ...	90	=	5	=	4	=	7½

In Britain, *Fahrenheit* is used ;—in France, *Celsius* or *Centigrade* ;—in Germany, *Reaumur* ;—and in Russia, that of *De Lisle.*

A Table of corresponding Degrees of Temperature of Fahrenheit Reaumur, and the Centigrade Scale.

Faht.	Reaum.	Centig.	Faht.	Reaum.	Centig.	Faht.	Reaum.	Centig.
214°	80·9°	101·1°	232°	88·9°	111·1°	250°	96·9°	121·1°
216	81·8	102·2	234	89·8	112·2	260	101·3	126·6
218	82·7	103·3	236	90·7	113·3	270	105·8	132·2
220	83·6	104·4	238	91·6	114·4	280	110·2	137·8
222	84·4	105·6	240	92·4	115·5	290	114·7	143·3
224	85·3	106·7	242	93·3	116·6	300	119·1	148.9
226	86·2	107·8	244	94·2	117·7	320	128·0	160·0
228	87·1	108·9	246	95·1	118·8	350	141·3	176·7
230	88·0	110·0	248	96·0	120·0			

TABLE OF SQUARES AND CUBES,

AND

SQUARE AND CUBE ROOTS OF NUMBERS.

No.	Sqres.	Cubes.	Sq. Root.	Cube Root.	No.	Sqres.	Cubes.	Sq. Root.	Cube Root.
1	1	1	1·0	1·0	66	4356	287496	8·124038	4·041240
2	4	8	1·4142136	1·2599210	67	4489	300763	8·185352	4·061548
3	9	27	1·7320508	1·4422496	68	4624	314432	8·246211	4·081655
4	16	64	2·0	1·5874011	69	4761	328509	8·306623	4·101566
5	25	125	2·2360680	1·7099759	70	4900	343000	8·366600	4·121285
6	36	216	2·4494897	1·8171206	71	5041	357911	8·426149	4·140817
7	49	343	2·6457513	1·9129312	72	5184	373248	8·485281	4·160167
8	64	512	2·8284271	2·0	73	5329	389017	8·544003	4·179339
9	81	729	3·0	2·0800837	74	5476	405224	8·602325	4·198336
10	100	1000	3·1622777	2·1544347	75	5625	421875	8·660254	4·217163
11	121	1331	3·3166248	2·2239801	76	5776	438976	8·717797	4·235823
12	144	1728	3·4641016	2·2894286	77	5929	456533	8·774964	4·254321
13	169	2197	3·6055513	2·3513347	78	6084	474552	8·831760	4·272658
14	196	2744	3·7416574	2·4101422	79	6241	493039	8·888194	4·290840
15	225	3375	3·8729833	2·4662121	80	6400	512000	8·944271	4·308869
16	256	4096	4·0	2·5198421	81	6561	531441	9·0	4·326748
17	289	4913	4·1231056	2·5712816	82	6724	551368	9·055385	4·344481
18	324	5832	4·2426407	2·6207414	83	6889	571787	9·110433	4·362070
19	361	6859	4·3588989	2·6684016	84	7056	592704	9·165151	4·379519
20	400	8000	4·4721360	2·7144177	85	7225	614125	9·219544	4·396829
21	441	9261	4·5825757	2·7589243	86	7396	636056	9·273618	4·414004
22	484	10648	4·6904158	2·8020393	87	7569	658503	9·327379	4·431047
23	529	12167	4·7958315	2·8438670	88	7744	681472	9·380831	4·447069
24	576	13824	4·8989795	2·8844991	89	7921	704969	9·433981	4·464745
25	625	15625	5·0	2·9240177	90	8100	729000	9·486833	4·481404
26	676	17576	5·0990195	2·9624960	91	8281	753571	9·539392	4·497941
27	729	19683	5·1961524	3·0	92	8464	778688	9·591663	4·514357
28	784	21952	5·2915026	3·0365889	93	8649	804357	9·643650	4·530654
29	841	24389	5·3851648	3·0723168	94	8836	830584	9·695359	4·546835
30	900	27000	5·4772256	3·1072325	95	9025	857374	9·746794	4·562902
31	961	29791	5·5677644	3·1413806	96	9216	884736	9·797959	4·578857
32	1024	32768	5·6568542	3·1748021	97	9409	912673	9·848857	4·594700
33	1089	35937	5·7445626	3·2075343	98	9604	941192	9·899494	4·610436
34	1156	39304	5·8309519	3·2396118	99	9801	970299	9·949874	4·626065
35	1225	42875	5·9160798	3·2710663	100	10000	1000000	10·0	4·641588
36	1296	46656	6·0	3·3019272	101	10201	1030301	10·049875	4·657009
37	1369	50653	6·0827625	3·3322218	102	10404	1061208	10·099504	4·672328
38	1444	54872	6·1644140	3·3619754	103	10609	1092727	10·148891	4·687548
39	1521	59319	6·2449980	3·3912114	104	10816	1124864	10·198039	4·702669
40	1600	64000	6·3245553	3·4199519	105	11025	1157625	10·246950	4·717694
41	1681	68921	6·4031242	3·4482172	106	11236	1191016	10·295630	4·732623
42	1764	74088	6·4807407	3·4760266	107	11449	1225043	10·344080	4·747459
43	1849	79507	6·5574385	3·5033981	108	11664	1259712	10·392304	4·762203
44	1936	85184	6·6332496	3·5303483	109	11881	1295029	10·440306	4·776856
45	2025	91125	6·7082039	3·5568933	110	12100	1331000	10·488088	4·791419
46	2116	97336	6·7823300	3·5830479	111	12321	1367631	10·535653	4·805896
47	2209	103823	6·8556546	3·6088261	112	12544	1404928	10·583005	4·820284
48	2304	110592	6·9282032	3·6342411	113	12769	1442897	10·630145	4·834588
49	2401	117649	7·0	3·6593057	114	12996	1481544	10·677078	4·848807
50	2500	125000	7·0710678	3·6840314	115	13225	1520875	10·723805	4·862944
51	2601	132651	7·1414284	3·7084298	116	13456	1560896	10·770329	4·876999
52	2704	140608	7·2111026	3·7325111	117	13689	1601613	10·816653	4·890973
53	2809	148877	7·2801099	3·7562858	118	13924	1643032	10·862780	4·904868
54	2916	157464	7·3484692	3·7797631	119	14161	1685159	10·908712	4·918684
55	3025	166375	7·4161985	3·8029525	120	14400	1728000	10·954451	4·932424
56	3136	175616	7·4833148	3·8258624	121	14641	1771561	11·0	4·946087
57	3249	185193	7·5498344	3·8485011	122	14834	1815848	11·045361	4·959675
58	3364	195112	7·6157731	3·8708766	123	15129	1860867	11·090536	4·973189
59	3481	205379	7·6811457	3·8929965	124	15376	1906624	11·135528	4·986631
60	3600	216000	7·7459667	3·9148676	125	15625	1953125	11·180339	5·0
61	3721	226981	7·8102497	3·9304972	126	15876	2000376	11·224972	5·013297
62	3844	238328	7·8740079	3·9578915	127	16129	2048383	11·269427	5·026525
63	3969	250047	7·9372539	3·9790571	128	16384	2097152	11·313708	5·039684
64	4096	262144	8·0	4·0	129	16641	2146689	11·357816	5·052774
65	4225	274625	8·0622577	4·0207256	130	16900	2197000	11·401754	5·065797

No.	Squares.	Cubes.	Sq. Root.	Cube Rt.	No.	Squares.	Cubes.	Sq. Root.	Cube Root.
131	17161	2248091	11·44552	5·07875	206	42436	8741816	14·35270	5·905940
132	17424	2299968	11·48912	5·09164	207	42849	8869743	14·38749	5·915481
133	17689	2352637	11·53256	5·10446	208	43264	8998912	14·42220	5·924992
134	17956	2406104	11·57583	5·11722	209	43681	9129329	14·45683	5·934472
135	18225	2460375	11·61895	5·12992	210	44100	9261000	14·49137	5·943922
136	18496	2515456	11·66190	5·14256	211	44521	9393931	14·52583	5·953341
137	18769	2571353	11·70469	5·15513	212	44944	9528128	14·56021	5·962732
138	19044	2628072	11·74734	5·16764	213	45369	9663597	14·59451	5·972092
139	19321	2685619	11·78982	5·18010	214	45796	9800344	14·62873	5·981424
140	19600	2744000	11·83215	5·19249	215	46225	9938375	14·66287	5·990726
141	19881	2803221	11·87434	5·20482	216	46656	10077696	14·69693	6·0
142	20164	2863288	11·91637	5·21710	217	47089	10218313	14·73091	6·009245
143	20449	2924207	11·95826	5·22932	218	47524	10360232	14·76482	6·018461
144	20736	2985984	12·0	5·24148	219	47961	10503459	14·79864	6·027650
145	21025	3048625	12·04159	5·25358	220	48400	10648000	14·83239	6·036810
146	21316	3112136	12·08304	5·26563	221	48841	10793861	14·86606	6·045943
147	21609	3176523	12·12435	5·27763	222	49284	10941048	14·89966	6·055048
148	21904	3241792	12·16552	5·28957	223	49729	11089567	14·93318	6·064127
149	22201	3307949	12·20655	5·30145	224	50176	11239424	14·96662	6·073177
150	22500	3375000	12·24744	5·31329	225	50625	11390625	15·0	6·082402
151	22801	3442951	12·28820	5·32507	226	51076	11543176	15·03329	6·099199
152	23104	3511008	12·32882	5·33680	227	51529	11697083	15·06651	6·100170
153	23409	3581577	12·36931	5·34848	228	51984	11852352	15·09966	6·109114
154	23716	3652264	12·40967	5·36010	229	52441	12008989	15·13274	6·118033
155	24025	3723875	12·44989	5·37168	230	52900	12167000	15·16575	6·126925
156	24336	3796416	12·48999	5·38321	231	53361	12326391	15·19868	6·135792
157	24649	3869893	12·52996	5·39469	232	53824	12487168	15·23154	6·144633
158	24964	3944312	12·56980	5·40612	233	54289	12649337	15·26433	6·153449
159	25281	4019679	12·60952	5·41750	234	54756	12812904	15·29705	6·162240
160	25600	4096000	12·64911	5·42883	235	55225	12977875	15·32970	6·171005
161	25921	4173281	12·68857	5·44012	236	55696	13144256	15·36229	6·179746
162	26244	4251528	12·72792	5·45136	237	56169	13312053	15·39480	6·188462
163	26569	4330747	12·76714	5·46255	238	56644	13481272	15·42724	6·197154
164	26896	4410944	12·80624	5·47370	239	57121	13651919	15·45962	6·205821
165	27225	4492125	12·84523	5·48480	240	57600	13824000	15·49193	6·214465
166	27556	4574296	12·88409	5·49586	241	58081	13997521	15·52417	6·223084
167	27889	4657463	12·92284	5·50687	242	58564	14172488	15·55634	6·231679
168	28224	4741632	12·96148	5·51784	243	59049	14348907	15·58845	6·240251
169	28561	4826809	13·0	5·52877	244	59536	14526784	15·62049	6·248799
170	28900	4913000	13·93840	5·53965	245	60025	14706125	15·65247	6·257324
171	29241	5000211	13·07669	5·55049	246	60516	14886936	15·68438	6·265826
172	29584	5088448	13·11487	5·56129	247	61009	15069223	15·71623	6·274305
173	29929	5177717	13·15294	5·57205	248	61504	15252992	15·74801	6·282761
174	30276	5268024	13·19090	5·58277	249	62001	15438249	15·77973	6·291194
175	30625	5359375	13·22875	5·59344	250	62500	15625000	15·81138	6·299605
176	30976	5451776	13·26649	5·60407	251	63001	15813251	15·84297	6·307993
177	31329	5545233	13·30413	5·61467	252	63504	16003008	15·87450	6·316359
178	31684	5639752	13·34166	5·62522	253	64009	16194277	15·90597	6·324703
179	32041	5735339	13·37908	5·63574	254	64516	16387064	15·93737	6·333025
180	32400	5832000	13·41640	5·64621	255	65025	16581375	15·96871	6·341325
181	32761	5929741	13·45362	5·65665	256	65536	16777216	16·0	6·349604
182	33124	6028568	13·49073	5·66705	257	66049	16974593	16·03121	6·357861
183	33489	6128487	13·52774	5·67741	258	66564	17173512	16·06237	6·366096
184	33856	6229504	13·56466	5·68773	259	67081	17373979	16·09347	6·374311
185	34225	6331625	13·60147	5·69801	260	67600	17576000	16·12451	6·382504
186	34596	6434856	13·63818	5·70826	261	68121	17779581	16·15549	6·390676
187	34969	6539203	13·67479	5·71847	262	68644	17984728	16·18641	6·398827
188	35344	6644672	13·71130	5·72865	263	69169	18191447	16·21727	6·406958
189	35721	6751269	13·74772	5·73879	264	69696	18399744	16·24807	6·415068
190	36100	6859000	13·78404	5·74889	265	70225	18609625	16·27882	6·423158
191	36481	6967871	13·82027	5·75896	266	70756	18821096	16·30950	6·431227
192	36864	7077888	13·85640	5·76899	267	71289	19034163	16·34013	6·439276
193	37249	7189517	13·89244	5·77899	268	71824	19248832	16·37070	6·447305
194	37636	7301384	13·92838	5·78896	269	72361	19465109	16·40121	6·455314
195	38025	7414875	13·96424	5·79889	270	72900	19683000	16·43167	6·463304
196	38416	7529536	14·0	5·80878	271	73441	19902511	16·46207	6·471273
197	38809	7645373	14·03566	5·81864	272	73984	20123643	16·49242	6·479223
198	39204	7762392	14·07124	5·82848	273	74529	20346417	16·52271	6·487154
199	39601	7880599	14·10673	5·83827	274	75076	20570824	16·55294	6·495065
200	40000	8000000	14·14213	5·84803	275	75625	20796875	16·58312	6·502957
201	40401	8120601	14·17744	5·85776	276	76176	21024576	16·61324	6·510830
202	40804	8242408	14·21267	5·86746	277	76729	21253933	16·64331	6·518683
203	41209	8365427	14·24780	5·87713	278	77284	21484952	16·67833	6·526518
204	41616	8489664	14·28285	5·88676	279	77841	21717639	16·70329	6·534335
205	42025	8615125	14·31782	5·89636	280	78400	21952000	16·73320	6·542132

No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.	No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.
281	78961	22188041	16·7630	6·5499	356	126736	45118016	18·86796	7·08734
282	79524	22425768	16·7928	6·5576	357	127449	45499293	18·89444	7·09397
283	80089	22665187	16·8226	6·5654	358	128164	45882712	18·92088	7·10058
284	80656	22906304	16·8522	6·5731	359	128881	46268279	18·94729	7·10719
285	81225	23149125	16·8819	6·5808	360	129600	46656000	18·97366	7·11378
286	81796	23393656	16·9115	6·5885	361	130321	47045881	19·00000	7·12036
287	82369	23639903	16·9410	6·5962	362	131044	47437928	19·02629	7·12693
288	82944	23887872	16·9705	6·6038	363	131769	47832147	19·05255	7·13349
289	83521	24137569	17·0	6·6114	364	132496	48228544	19·07878	7·14003
290	84100	24389000	17·0293	6·6191	365	133225	48627125	19·10497	7·14656
291	84681	24642171	17·0587	6·6267	366	133956	49027896	19·13112	7·15309
292	85264	24897088	17·0880	6·6342	367	134689	49430863	19·15724	7·15959
293	85849	25153757	17·1172	6·6418	368	135424	49836032	19·18332	7·16609
294	86436	25412184	17·1464	6·6493	369	136161	50243409	19·20937	7·17258
295	87025	25672375	17·1755	6·6569	370	136900	50653000	19·23538	7·17905
296	87616	25934836	17·2046	6·6644	371	137641	51064811	19·26136	7·18551
297	88209	26198073	17·2336	6·6719	372	138384	51478848	19·28730	7·19196
298	88804	26463592	17·2626	6·6794	373	139129	51895117	19·31320	7·19840
299	89401	26730899	17·2916	6·6868	374	139876	52313624	19·33907	7·20483
300	90000	27000000	17·3205	6·6943	375	140625	52734375	19·36491	7·21124
301	90601	27270901	17·3493	6·7017	376	141376	53157376	19·39071	7·21765
302	91204	27543608	17·3781	6·7091	377	142129	53582633	19·41648	7·22404
303	91809	27818127	17·4068	6·7165	378	142884	54010152	19·44222	7·23042
304	92416	28094464	17·4355	6·7239	379	143641	54439939	19·46792	7·23679
305	93025	28372625	17·4642	6·7313	380	144400	54872000	19·49358	7·24315
306	93636	28652616	17·4928	6·7386	381	145161	55306341	19·51922	7·24950
307	94249	28934443	17·5214	6·7459	382	145924	55742968	19·54482	7·25584
308	94864	29218112	17·5499	6·7533	383	146689	56181887	19·57038	7·26216
309	95481	29503609	17·5783	6·7606	384	147456	56623104	19·59591	7·26848
310	96100	29791000	17·6068	6·7678	385	148225	57066625	19·62141	7·27478
311	96721	30080231	17·6851	6·7751	386	148996	57512456	19·64688	7·28107
312	97344	30371328	17·6635	6·7824	387	149769	57960603	19·67231	7·28736
313	97969	30664297	17·6918	6·7896	388	150544	58411072	19·69771	7·29363
314	98596	30959144	17·7200	6·7968	389	151321	58863869	19·72308	7·29989
315	99225	31255875	17·7482	6·8040	390	152100	59319000	19·74841	7·30614
316	99856	31554496	17·7763	6·8112	391	152881	59776471	19·77371	7·31238
317	100489	31855013	17·8044	6·8184	392	153664	60236288	19·79898	7·31861
318	101124	32157432	17·8325	6·8256	393	154449	60698457	19·82422	7·32482
319	101761	32461759	17·8605	6·8327	394	155236	61162984	19·84943	7·33103
320	102400	32768000	17·8885	6·8399	395	156025	61629875	19·87460	7·33723
321	103041	33076161	17·9164	6·8470	396	156816	62099136	19·89974	7·34342
322	103684	33386248	17·9443	6·8541	397	157609	62570773	19·92485	7·34959
323	104329	33698267	17·9722	6·8612	398	158404	63044792	19·94993	7·35576
324	104976	34012224	18·0	6·8682	399	159201	63521199	19·97498	7·36191
325	105625	34328125	18·0277	6·8753	400	160000	64000000	20·00000	7·36806
326	106276	34645976	18·0554	6·8823	401	160801	64481201	20·02498	7·37419
327	106929	34965783	18·0831	6·8894	402	161604	64964808	20·04993	7·38032
328	107584	35287552	18·1107	6·8964	403	162409	65450827	20·07485	7·38643
329	108241	35611289	18·1383	6·9034	404	163216	65939264	20·09975	7·39254
330	108900	35937000	18·1659	6·9104	405	164025	66430125	20·12461	7·39863
331	109561	36264691	18·1934	6·9173	406	164836	66923416	20·14944	7·40472
332	110224	36594368	18·2208	6·9243	407	165649	67419143	20·17424	7·41079
333	110889	36926037	18·2482	6·9313	408	166464	67917312	20·19900	7·41685
334	111556	37259704	18·2756	6·9382	409	167281	68417929	20·22374	7·42291
335	112225	37595375	18·3030	6·9451	410	168100	68921000	20·24845	7·42895
336	112896	37933056	18·3303	6·9520	411	168921	69426531	20·27313	7·43499
337	113569	38272753	18·3575	6·9589	412	169744	69934528	20·29778	7·44101
338	114244	38614472	18·3847	6·9658	413	170569	70444997	20·32240	7·44703
339	114921	38958219	18·4119	6·9726	414	171396	70957944	20·34698	7·45303
340	115600	39304000	18·4390	6·9795	415	172225	71473375	20·37154	7·45903
341	116281	39651821	18·4661	6·9863	416	173056	71991296	20·39607	7·46502
342	116964	40001688	18·4932	6·9931	417	173889	72511713	20·42057	7·47099
343	117649	40353607	18·5202	7·0	418	174724	73034632	20·44504	7·47696
344	118336	40707584	18·5472	7·0067	419	175561	73560059	20·46948	7·48292
345	119025	41063625	18·5741	7·0135	420	176400	74088000	20·49390	7·48887
346	119716	41421736	18·6010	7·0203	421	177241	74618461	20·51828	7·49481
347	120409	41781923	18·6279	7·0271	422	178084	75151448	20·54263	7·50074
348	121104	42144192	18·6547	7·0338	423	178929	75686967	20·56696	7·50666
349	121801	42508549	18·6815	7·0405	424	179776	76225024	20·59126	7·51257
350	122500	42875000	18·7082	7·0472	425	180625	76765625	20·61552	7·51847
351	123201	43243551	18·7349	7·0540	426	181476	77308776	20·63976	7·52436
352	123904	43614208	18·7616	7·0606	427	182329	77854483	20·66397	7·53024
353	124609	43986977	18·7882	7·0673	428	183184	78402752	20·68816	7·53612
354	125316	44361864	18·8148	7·0740	429	184041	78953589	20·71231	7·54198
355	126025	44738875	18·8414	7·0806	430	184900	79507000	20·73644	7·54784

No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.	No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.
431	185761	80062991	20·7605	7·5536	506	256036	129554216	22·4944	7·9686
432	186624	80621568	20·7846	7·5595	507	257049	130323843	22·5166	7·9738
433	187489	81182737	20·8086	7·5653	508	258064	131096512	22·5388	7·9791
434	188356	81746504	20·8326	7·5711	509	259081	131872229	22·5610	7·9843
435	189225	82312875	20·8566	7·5769	510	260100	132651000	22·5831	7·9895
436	190096	82881856	20·8806	7·5827	511	261121	133432831	22·6053	7·9947
437	190969	83453453	20·9045	7·5885	512	262144	134217728	22·6274	8·0
438	191844	84027672	20·9284	7·5943	513	263169	135005697	22·6495	8·0052
439	192721	84604519	20·9523	7·6001	514	264196	135796744	22·6715	8·0104
440	193600	85184000	20·9761	7·6059	515	265225	136590875	22·6936	8·0155
441	194481	85766121	21·0	7·6116	516	266256	137388096	22·7156	8·0207
442	195364	86350888	21·0237	7·6174	517	267289	138188413	22·7376	8·0259
443	196249	86938307	21·0475	7·6231	518	268324	138991832	22·7596	8·0311
444	197136	87528384	21·0713	7·6288	519	269361	139798359	22·7815	8·0362
445	198025	88121125	21·0950	7·6346	520	270400	140608000	22·8035	8·0414
446	198916	88716536	21·1187	7·6403	521	271441	141420761	22·8254	8·0466
447	199809	89314623	21·1423	7·6460	522	272484	142236648	22·8473	8·0517
448	200704	89915392	21·1660	7·6517	523	273529	143055667	22·8691	8·0568
449	201601	90518849	21·1896	7·6574	524	274576	143877824	22·8910	8·0620
450	202500	91125000	21·2132	7·6630	525	275625	144703125	22·9128	8·0671
451	203401	91733851	21·2367	7·6687	526	276676	145531576	22·9346	8·0722
452	204304	92345408	21·2602	7·6744	527	277729	146363183	22·9564	8·0773
453	205209	92959677	21·2837	7·6800	528	278784	147197952	22·9782	8·0824
454	206116	93576664	21·3072	7·6857	529	279841	148035889	23·0	8·0875
455	207025	94196375	21·3307	7·6913	530	280900	148877001	23·0217	8·0926
456	207936	94818816	21·3541	7·6970	531	281961	149721291	23·0434	8·0977
457	208849	95443993	21·3775	7·7026	532	283024	150568768	23·0651	8·1028
458	209764	96071912	21·4009	7·7082	533	284089	151419437	23·0867	8·1079
459	210681	96702579	21·4242	7·7138	534	285156	152273304	23·1084	8·1129
460	211600	97336000	21·4476	7·7194	535	286225	153130375	23·1300	8·1180
461	212521	97972181	21·4709	7·7250	336	287296	153990656	23·1516	8·1230
462	213444	98611128	21·4941	7·7306	537	288369	154854153	23·1732	8·1281
463	214369	99252847	21·5174	7·7361	538	289444	155720872	23·1948	8·1331
464	215296	99897344	21·5406	7·7417	539	290521	156590819	23·2163	8·1382
465	216225	100544625	21·5638	7·7473	540	291600	157464000	23·2379	8·1432
466	217156	101194696	21·5870	7·7528	541	292681	158340421	23·2594	8·1482
467	218089	101847563	21·6101	7·7584	542	293764	159220088	23·2808	8·1532
468	219024	102503232	21·6333	7·7639	543	294849	160103007	23·3023	8·1583
469	219961	103161709	21·6564	7·7694	544	295936	160989184	23·3238	8·1633
470	220900	103823000	21·6794	7·7749	545	297025	161878625	23·3452	8·1683
471	221841	104487111	21·7025	7·7804	546	298116	162771336	23·3666	8·1733
472	222784	105154048	21·7255	7·7859	547	299209	163667323	23·3880	8·1782
473	223729	105823817	21·7485	7·7914	548	300304	164566592	23·4093	8·1832
474	224676	106496424	21·7715	7·7969	549	301401	165469149	23·4307	8·1882
475	225625	107171875	21·7944	7·8024	550	302500	166375000	23·4520	8·1932
476	226576	107850176	21·8174	7·8079	551	303601	167284151	23·4733	8·1981
477	227529	108531333	21·8403	7·8133	552	304704	168196608	23·4946	8·2031
478	228484	109215352	21·8632	7·8188	553	305809	169112377	23·5159	8·2080
479	229441	109902239	21·8860	7·8242	554	306916	170031464	23·5372	8·2130
480	230400	110592000	21·9089	7·8297	555	308025	170953875	23·5584	8·2179
481	231361	111284641	21·9317	7·8351	556	309136	171879616	23·5796	8·2228
482	232324	111980168	21·9544	7·8405	557	310249	172808693	23·6008	8·2278
483	233289	112678587	21·9772	7·8460	558	311364	173741112	23·6220	8·2327
484	234256	113379904	22·0	7·8514	559	312481	174676879	23·6431	8·2376
485	235225	114084125	22·0227	7·8568	560	313600	175616000	23·6643	8·2425
486	236196	114791256	22·0454	7·8622	561	314721	176558481	23·6854	8·2474
487	237169	115501303	22·0680	7·8676	562	315844	177504328	23·7065	8·2523
488	238144	116214272	22·0907	7·8729	563	316969	178453547	23·7276	8·2572
489	239121	116930169	22·1133	7·8783	564	318096	179406144	23·7486	8·2621
490	240100	117649000	22·1359	7·8837	565	319225	180362125	23·7697	8·2670
491	241081	118370771	22·1585	7·8890	566	320356	181321496	23·7907	8·2719
492	242064	119095488	22·1810	7·8944	567	321489	182284263	23·8117	8·2767
493	243049	119823157	22·2036	7·8997	568	322624	183250432	23·8327	8·2816
494	244036	120553784	22·2261	7·9051	569	323761	184220009	23·8537	8·2864
495	245025	121287375	22·2485	7·9104	570	324900	185193000	23·8746	8·2913
496	246016	122023936	22·2710	7·9157	571	326041	186169411	23·8956	8·2961
497	247009	122763473	22·2934	7·9210	572	327184	187149248	23·9165	8·3010
498	248004	123505992	22·3159	7·9264	573	328329	188132517	23·9374	8·3058
499	249001	124251499	22·3383	7·9317	574	329476	189119224	23·9582	8·3106
500	250000	125000000	22·3606	7·9370	575	330625	190109375	23·9791	8·3155
501	251001	125751501	22·3830	7·9422	576	331776	191102976	24·0	8·3203
502	252004	126506008	22·4053	7·9475	577	332927	192100033	24·0208	8·3251
503	253009	127263527	22·4276	7·9528	578	334084	193100552	24·0416	8·3299
504	254016	128024064	22·4499	7·9581	579	335241	194104539	24·0624	8·3347
505	255025	128787625	22·4722	7·9633	580	336400	195112000	24·0831	8·3396

No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.	No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.
581	337561	196122941	24·1039	8·3443	656	430336	282300416	25·6124	8·6889
582	338724	197137368	24·1246	8·3491	657	431639	283593393	25·6320	8·6933
583	339889	198155287	24·1453	8·3539	658	432964	284890312	25·6515	8·6977
584	341056	199176704	24·1660	8·3586	659	434281	286191179	25·6709	8·7021
585	342225	200201625	24·1867	8·3634	660	435600	287496000	25·6904	8·7065
586	343396	201230056	24·2074	8·3682	661	436921	288804781	25·7099	8·7109
587	344569	202262003	24·2280	8·3729	662	438244	290117528	25·7293	8·7153
588	345744	203297472	24·2487	8·3777	663	439569	291434247	25·7487	8·7197
589	346921	204336469	24·2693	8·3824	664	440896	292754944	25·7681	8·7241
590	348100	205379000	24·2899	8·3872	665	442225	294079625	25·7875	8·7285
591	349281	206425071	24·3104	8·3919	666	443556	295408296	25·8069	8·7328
592	350464	207474688	24·3310	8·3966	667	444899	296740963	25·8263	8·7372
593	351649	208527857	24·3515	8·4013	668	446224	298077632	25·8456	8·7416
594	352836	209584584	24·3721	8·4061	669	447561	299418309	25·8650	8·7459
595	354025	210644875	24·3926	8·4108	670	448900	300763000	25·8843	8·7503
596	355216	211708736	24·4131	8·4155	671	450241	302111711	25·9036	8·7546
597	356409	212776173	24·4335	8·4202	672	451584	303464448	25·9229	8·7590
598	357604	213847192	24·4540	8·4249	673	452929	304821217	25·9422	8·7633
599	358801	214921799	24·4744	8·4296	674	454276	306182024	25·9615	8·7677
600	360000	216000000	24·4948	8·4343	675	455625	307546875	25·9807	8·7720
601	361201	217081801	24·5153	8·4390	676	456976	308915776	26·0	8·7763
602	362404	218167208	24·5356	8·4436	677	458329	310288733	26·0192	8·7807
603	363609	219256227	24·5560	8·4483	678	459684	311665752	26·0384	8·7850
604	364816	220348864	24·5764	8·4530	679	461041	313046839	26·0576	8·7893
605	366025	221445125	24·5967	8·4576	680	462400	314432000	26·0768	8·7936
606	367236	222545016	24·6170	8·4623	681	463761	315821241	26·0959	8·7979
607	368449	223648543	24·6373	8·4670	682	465124	317214568	26·1151	8·8022
608	369664	224755712	24·6576	8·4716	683	466489	318611987	26·1342	8·8065
609	370881	225866529	24·6779	8·4762	684	467856	320013504	26·1533	8·8108
610	372100	226981000	24·6981	8·4809	685	469225	321419125	26·1725	8·8151
611	373321	228099131	24·7184	8·4855	686	470596	322828856	26·1916	8·8194
612	374544	229220928	24·7386	8·4901	687	471969	324242703	26·2106	8·8237
613	375769	230346397	24·7588	8·4948	688	473344	325660672	26·2297	8·8280
614	376996	231475544	24·7790	8·4994	689	474721	327082769	26·2488	8·8322
615	378225	232608375	24·7991	8·5040	690	476100	328509000	26·2678	8·8365
616	379456	233744896	24·8193	8·5086	691	477481	329939371	26·2868	8·8408
617	380689	234885113	24·8394	8·5132	692	478864	331373888	26·3058	8·8450
618	381924	236029032	24·8596	8·5178	693	480249	332812557	26·3248	8·8493
619	383161	237176659	24·8797	8·5224	694	481636	334255384	26·3438	8·8535
620	384400	238328000	24·8997	8·5270	695	483025	335702375	26·3628	8·8578
621	385641	239483061	24·9198	8·5316	696	484416	337153536	26·3818	8·8620
622	386884	240641848	24·9399	8·5361	697	485809	338608873	26·4007	8·8663
623	388129	241804367	24·9599	8·5407	698	487204	340068392	26·4196	8·8705
624	389376	242970624	24·9799	8·5453	699	488601	341532099	26·4386	8·8748
625	390625	244140625	25·0	8·5498	700	490000	343000000	26·4575	8·8790
626	391876	245134376	25·0199	8·5544	701	491401	344472101	26·4764	8·8832
627	393129	246491883	25·0399	8·5589	702	492804	345948408	26·4952	8·8874
628	394384	247673152	25·0599	8·5635	703	494209	347428927	26·5141	8·8917
629	395641	248858189	25·0798	8·5680	704	495616	348913664	26·5329	8·8959
630	396900	250047000	25·0998	8·5726	705	497025	350402625	26·5518	8·9001
631	398161	251239591	25·1197	8·5771	706	498436	351895816	26·5706	8·9043
632	399424	252435968	25·1396	8·5816	707	499849	353393243	26·5894	8·9085
633	400689	253636137	25·1594	8·5862	708	501264	354894912	26·6082	8·9127
634	401956	254840104	25·1793	8·5907	709	502681	356400829	26·6270	8·9169
635	403225	256047875	25·1992	8·5952	710	504100	357911000	26·6458	8·9211
636	404496	257259456	25·2190	8·5997	711	505521	359425431	26·6645	8·9253
637	405769	258474853	25·2388	8·6042	712	506944	360944128	26·6833	8·9294
638	407044	259694072	25·2586	8·6087	713	508369	362467097	26·7020	8·9336
639	408321	260917119	25·2784	8·6132	714	509796	363994344	26·7207	8·9378
640	409600	262144000	25·2982	8·6177	715	511225	365525875	26·7394	8·9420
641	410881	263374721	25·3179	8·6222	716	512656	367061696	26·7581	8·9461
642	412164	264609288	25·3377	8·6267	717	514089	368601813	26·7768	8·9503
643	413449	265847707	25·3574	8·6311	718	515524	370146232	26·7955	8·9545
644	414736	267089984	25·3771	8·6356	719	516961	371694959	26·8141	8·9586
645	416125	268336125	25·3968	8·6401	720	518400	373248000	26·8328	8·9628
646	417316	269586136	25·4165	8·6445	721	519841	374805361	26·8514	8·9669
647	418609	270840023	25·4361	8·6490	722	521284	376367048	26·8700	8·9711
648	419904	272097792	25·4558	8·6534	723	522729	377933067	26·8886	8·9752
649	421201	273359449	25·4754	8·6579	724	524176	379503424	26·9072	8·9793
650	422500	274625000	25·4950	8·6623	725	525625	381078125	26·9258	8·9835
651	423801	275894451	25·5147	8·6668	726	527076	382657176	26·9443	8·9876
652	425104	277167808	25·5342	8·6712	727	528529	384240583	26·9629	8·9917
653	426409	278445077	25·5538	8·6756	728	529984	385828352	26·9814	8·9958
654	427716	279726264	25·5734	8·6801	729	531441	387420489	27·0	9·0
655	429025	281011375	25·5929	8·6845	730	532900	389017000	27·0185	9·0041

No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.	No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.
731	534361	390617891	27·0370	9·0082	806	649636	523606616	28·3901	9·3063
732	535824	392223168	27·0554	9·0123	807	651249	525557943	28·4077	9·3101
733	537289	393832837	27·0739	9·0164	808	652864	527514112	28·4253	9·3140
734	538756	395446904	27·0924	9·0205	809	654481	529475129	28·4429	9·3178
735	540225	397065375	27·1108	9·0246	810	656100	531441000	28·4604	9·3216
736	541696	398688256	27·1293	9·0287	811	657721	533411731	28·4780	9·3255
737	543169	400315553	27·1477	9·0328	812	659344	535387328	28·4956	9·3293
738	544644	401947272	27·1661	9·0368	813	660969	537367797	28·5131	9·3331
739	546121	403583419	27·1845	9·0409	814	662596	539353144	28·5306	9·3370
740	547600	405224000	27·2029	9·0450	815	664225	541343375	28·5482	9·3408
741	549801	406869021	27·2213	9·0491	816	665856	543338496	28·5657	9·3446
742	550564	408518488	27·2396	9·0531	817	667489	545338513	28·5832	9·3484
743	552049	410172407	27·2580	9·0572	818	669124	547343432	28·6006	9·3522
744	553536	411830784	27·2763	9·0613	819	670761	549353259	28·6181	9·3560
745	555025	413493625	27·2946	9·0653	820	672400	551368000	28·6356	9·3599
746	556516	415160936	27·3130	9·0694	821	674041	553387661	28·6530	9·3637
747	558009	416832723	27·3313	9·0734	822	675684	555412248	28·6705	9·3675
748	559504	418508992	27·3495	9·0775	823	677329	557441767	28·6879	9·3713
749	561001	420189749	27·3678	9·0815	824	678976	559476224	28·7054	9·3750
750	562500	421875000	27·3861	9·0856	825	680625	561515625	28·7228	9·3788
751	564001	423564751	27·4043	9·0896	826	682276	563559976	28·7402	9·3826
752	565504	425259008	27·4226	9·0936	827	683929	565609283	28·7576	9·3864
753	567009	426957777	27·4408	9·0977	828	685584	567663552	28·7749	9·3902
754	568516	428661064	27·4590	9·1017	829	687241	569722789	28·7923	9·3940
755	570025	430368875	27·4772	9·1057	830	688900	571787000	28·8097	9·3977
756	571536	432081216	27·4954	9·1097	831	690561	573856191	28·8270	9·4015
757	573049	433798093	27·5136	9·1137	832	692224	575930368	28·8444	9·4053
758	574564	435519512	27·5317	9·1177	833	693889	578009537	28·8617	9·4091
759	576081	437245479	27·5499	9·1218	834	695556	580093704	28·8790	9·4128
760	577600	438976000	27·5680	9·1258	835	697225	582182875	28·8963	9·4166
761	579121	440711081	27·5862	9·1298	836	698896	584277056	28·9136	9·4203
762	580644	442450728	27·6043	9·1338	837	700569	586376253	28·9309	9·4241
763	582169	444194947	27·6224	9·1377	838	702244	588480472	28·9482	9·4278
764	583696	445943744	27·6405	9·1417	839	703921	590589719	28·9654	9·4316
765	585225	447697125	27·6586	9·1457	840	705600	592704000	28·9827	9·4353
766	586756	449455096	27·6767	9·1497	841	707281	594823321	29·0	9·4391
767	588289	451217663	27·6947	9·1537	842	708964	596947688	29·0172	9·4428
768	589824	452984832	27·7128	9·1577	843	710649	599077107	29·0344	9·4466
769	591361	454756609	27·7308	9·1616	844	712336	601211584	29·0516	9·4503
770	592900	456533000	27·7488	9·1656	845	714025	603351125	29·0688	9·4540
771	594441	458314011	27·7668	9·1696	846	715716	605495736	29·0860	9·4577
772	595984	460099648	27·7848	9·1735	847	717409	607645423	29·1032	9·4615
773	597529	461889917	27·8028	9·1775	848	719104	609800192	29·1204	9·4652
774	599076	463684824	27·8208	9·1815	849	720801	611960049	29·1376	9·4689
775	600625	465484375	27·8388	9·1854	850	722500	614125000	29·1547	9·4726
776	602176	467288576	27·8567	9·1894	851	724201	616295051	29·1719	9·4763
777	603729	469097433	27·8747	9·1933	852	725904	618470208	29·1890	9·4801
778	605284	470910952	27·8926	9·1972	853	727609	620650477	29·2061	9·4838
779	606841	472729139	27·9105	9·2012	854	729316	622835864	29·2232	9·4875
780	608400	474552000	27·9284	9·2051	855	731025	625026375	29·2403	9·4912
781	609961	476379541	27·9463	9·2090	856	732736	627222016	29·2574	9·4949
782	611524	478211768	27·9642	9·2130	857	634449	629422793	29·2745	9·4986
783	613089	480048687	27·9821	9·2169	858	736164	631628712	29·2916	9·5023
784	614656	481890304	28·0	9·2208	859	737881	633839779	29·3087	9·5059
785	616225	483736625	28·0178	9·2247	860	739600	636056000	29·3257	9·5096
786	617796	485587656	28·0356	9·2287	861	741321	638277381	29·3428	9·5133
787	619369	487443403	28·0535	9·2326	862	743044	640503928	29·3598	9·5170
788	620944	489303872	28·0713	9·2365	863	744769	642735647	29·3768	9·5207
789	622521	491169069	28·0891	9·2404	864	746496	644972544	29·3938	9·5244
790	624100	493039000	28·1069	9·2443	865	748225	647214625	29·4108	9·5280
791	625681	494913671	28·1247	9·2482	866	749956	649461896	29·4278	9·5317
792	627624	496793088	28·1424	9·2521	867	751689	651714363	29·4448	9·5354
793	628849	498677257	28·1602	9·2560	868	753424	653972032	29·4618	9·5390
794	630436	500566184	28·1780	9·2599	869	755161	656234909	29·4788	9·5427
795	632025	502459875	28·1957	9·2637	870	756900	658503000	29·4957	9·5464
796	633616	504358336	28·2134	9·2676	871	758641	660776311	29·5127	9·5500
797	635209	506261573	28·2311	9·2715	872	760384	663054848	29·5296	9·5537
798	636804	508169592	28·2488	9·2754	873	762129	665338617	29·5465	9·5573
799	638401	510082399	28·2665	9·2793	874	763876	667627624	29·5634	9·5610
800	640000	512000000	28·2842	9·2831	875	765625	669921875	29·5803	9·5646
801	641601	513922401	28·3019	9·2870	876	767376	672221376	29·5972	9·5682
802	643204	515849608	28·3196	9·2909	877	769129	674526133	29·6141	9·5719
803	644809	517781627	28·3372	9·2947	878	770884	676836152	29·6310	9·5755
804	646416	519718464	28·3548	9·2986	879	772641	679151439	29·6479	9·5792
805	648025	521660125	28·3725	9·3024	880	774400	681472000	29·6647	9·5828

No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.	No.	Squares.	Cubes.	Sq. Root.	Cub. Rt.
881	776161	683797841	29·6816	9·5864	941	885481	833237621	30·6757	9·7993
882	777924	686128968	29·6984	9·5900	942	887364	835896888	30·6920	9·8028
883	779689	688465387	29·7153	9·5937	943	889249	838561807	30·7083	9·8062
884	781456	690807104	29·7321	9·5973	944	891136	841232384	30·7245	9·8097
885	783225	693154125	29·7489	9·6009	945	893025	843908625	30·7408	9·8131
886	784996	695506456	29·7657	9·6045	946	894916	846590536	30·7571	9·8166
887	786769	697864103	29·7825	9·6081	947	896808	849278123	30·7733	9·8201
888	788544	700227072	29·7993	9·6117	948	898704	851971392	30·7896	9·8235
889	790321	702595369	29·8161	9·6153	949	900601	854670349	30·8058	9·8270
890	792100	704969000	29·8328	9·6190	950	902500	857375000	30·8220	9·8304
891	793881	707347971	29·8496	9·6226	951	904401	860085351	30·8382	9·8339
892	795664	709732288	29·8663	9·6262	952	906304	862801408	30·8544	9·8373
893	797449	712121957	29·8831	9·6297	953	908209	865523177	30·8706	9·8408
894	799236	714516984	29·8998	9·6333	954	910116	868250664	30·8868	9·8442
895	801025	716917375	29·9165	9·6369	955	912025	870983875	30·9030	9·8476
896	802816	719323136	29·9332	9·6405	956	913936	873722816	30·9192	9·8511
897	804609	721734273	29·9499	9·6441	957	915849	876467493	30·9354	9·8545
898	806404	724150792	29·9666	9·6477	958	917764	879217912	30·9515	9·8579
899	808201	726572699	29·9833	9·6513	959	919681	881974079	30·9677	9·8614
900	810000	729000000	30·0	9·6548	960	921600	884736000	30·9838	9·8648
901	811801	731432701	30·0166	9·6584	961	923521	887503681	31·0	9·8682
902	813604	733870808	30·0333	9·6620	962	925444	890277128	31·0161	9·8716
903	815409	736314327	30·0499	9·6656	963	927369	893056347	31·0322	9·8751
904	817216	738763264	30·0665	9·6691	964	929296	895841344	31·0483	9·8785
905	819025	741217625	30·0832	9·6727	965	931225	898632125	31·0644	9·8819
906	820836	743677416	30·0998	9·6763	966	933156	901428696	31·0805	9·8853
907	822649	746142643	30·1164	9·6798	967	935089	904231063	31·0966	9·8887
908	824464	748613312	30·1330	9·6834	968	937024	907039232	31·1126	9·8921
909	826281	751089429	30·1496	9·6869	969	938961	909853209	31·1287	9·8955
910	828100	753571000	30·1662	9·6905	970	940900	912673000	31·1448	9·8989
911	829921	756058031	30·1827	9·6940	971	942841	915498611	31·1608	9·9023
912	831744	758550825	30·1993	9·6976	972	944784	918330048	31·1769	9·9057
913	833569	761048497	30·2158	9·7011	973	946729	921167317	31·1929	9·9091
914	835396	763551944	30·2324	9·7046	974	948676	924010424	31·2089	9·9125
915	837225	766060875	30·2489	9·7082	975	950625	926859375	31·2249	9·9159
916	839056	768575296	30·2654	9·7117	976	952576	929714176	31·2409	9·9193
917	840889	771095213	30·2820	9·7153	977	954529	932574833	31·2569	9·9227
918	842724	773620632	30·2985	9·7188	978	956484	935441352	31·2729	9·9261
919	844561	776151559	30·3150	9·7223	979	958441	938313739	31·2889	9·9295
920	846400	778688000	30·3315	9·7258	980	960400	941192000	31·3049	9·9328
921	848241	781229961	30·3479	9·7294	981	962361	944076141	31·3209	9·9362
922	850084	783777448	30·3644	9·7329	982	964324	946966168	31·3368	9·9396
923	851929	786330467	30·3809	9·7364	983	966289	949862087	31·3528	9·9430
924	853776	788889024	30·3973	9·7399	984	968256	952763904	31·3687	9·9463
925	855625	791453125	30·4138	9·7434	985	970225	955671625	31·3847	9·9497
926	857476	794022776	30·4302	9·7469	986	972196	958585256	31·4006	9·9531
927	859329	796597983	30·4466	9·7504	987	974169	961504803	31·4165	9·9564
928	861184	799178752	30·4630	9·7539	988	976144	964430272	31·4324	9·9598
929	863041	801765089	30·4795	9·7575	989	978121	967361669	31·4483	9·9631
930	864900	804357000	30·4959	9·7610	990	980100	970299000	31·4642	9·9665
931	866761	806954491	30·5122	9·7644	991	982081	973242271	31·4801	9·9699
932	868624	809557568	30·5286	9·7679	992	984064	976191488	31·4960	9·9732
933	870489	812166237	30·5450	9·7714	993	986049	979146657	31·5119	9·9766
934	872356	814780504	30·5614	9·7749	994	988036	982107784	31·5277	9·9799
935	874225	817400375	30·5777	9·7784	995	990025	985074875	31·5436	9·9833
936	876096	820025856	30·5941	9·7829	996	992016	988047936	31·5594	9·9866
937	877969	822656953	30·6104	9·7854	997	994009	991026973	31·5753	9·9899
938	879844	825293672	30·6267	9·7889	998	996004	994011992	31·5911	9·9933
939	881721	827936019	30·6431	9·7923	999	998001	997002999	31·6069	9·9966
940	883600	830584000	30·6594	9·7958	1000	1000000	1000000000	31·6227	10·0

To find the Square or Cube Root of a Number consisting of integers and decimals.

Rule.—Multiply the difference between the root of the integer part of the given number, and the root of the next higher integer number, by the decimal part of the given number, and add the product to the root of the given integer number; the sum is the root required.

Example.—Required the square root of 20·321.

Square root of 21 = 4·5825

Do. - 20 = 4·4721

·1104 × ·321 + 4·4721 = 4·5075384, the square root required.

Required the cube root of 16·42.

Cube root of 17 = 2·5712

Do. 16 = 2·5198

·0514 × ·42 + 2·5198 = 2·541388, the cube root required.

To find the Square of a greater Number than is contained in the Table.

Rule 1.—If the number required to be squared exceed, by 2, 3, 4, or any other number of times, any number contained in the Table, let the square affixed to the number in the Table be multiplied by the square of 2, 3, or 4, &c., and the product will be the answer sought.

Example.—Required the square of 2595.

2595 is three times greater than 865; and the square of 865, as per Table, is 748225.

Then, $748225 \times 3^2 = 6734025$, Ans.

Rule 2.—If the number required to be squared be an odd number, and do not exceed twice the amount of any number contained in the Table, find the two numbers nearest to each other, which, added together, make that sum; then, the sum of the squares of these two numbers, as per Table, multiplied by 2, will exceed the square required by 1.

Example.—Required the square of 1865.

$$\text{Two nearest numbers} \left.\begin{matrix} 932 \\ 933 \end{matrix}\right\} = 1865.$$

$$\text{Then, per Table,} \left\{\begin{matrix} 932^2 = 868624 \\ 933^2 = 870489 \end{matrix}\right\} = 1739113 \times 2 =$$

3478226 — 1 = 3478225, Ans.

To find the Cube of a greater Number than is contained in the Table.

Rule.—Proceed, as in squares, to find how many times the number required to be cubed exceeds a number contained in the Table. Multiply the cube of that number by the cube of as many times as the number sought exceeds the number in the Table, and the product will be the answer required.

Example.—Required the cube of 3984.

3984 is 4 times greater than 996; and the cube of 996, as per Table, is 988047936.

Then, $988047936 \times 4^3 = 63235067904$, Ans.

To find the Squares of Numbers following each other in arithmetical progression.

RULE.—Find, in the usual manner, the squares of the first two numbers, and subtract the less from the greater. Bring down, in a separate column, the square of the larger of these two numbers, and add it to the difference, with the addition of 2 as a constant quantity; the product will be the square of the next ensuing number.

Example.—Suppose it be required to extend the foregoing Table of squares.

$$\begin{array}{rrl}
\text{Then, } 1000^2 = & 1000000 & \\
999^2 = & 998001 & \\
\hline
 & 1999 & \text{Difference.} \\
\hline
 & 1000000 & \text{the square of 1000.} \\
\text{Difference } 1999 + 2 = & 2001 & \\
\hline
 & 1002001 & \text{the square of 1001.} \\
\text{Difference } 2001 + 2 = & 2003 & \\
\hline
 & 1004004 & \text{the square of 1002.} \\
\text{Difference } 2003 + 2 = & 2005 & \\
\hline
 & 1006009 & \text{the square of 1003.} \\
\text{Difference } 2005 + 2 = & 2007 & \\
\hline
 & 1008016 & \text{the square of 1004.}
\end{array}$$

In a similar manner the squares of any numbers, following each other in arithmetical progression, may be found; or, the foregoing Table may easily be extended to any required length.

To find the Cubes of Numbers following each other in arithmetical progression.

The cubes of a natural series of numbers may be found by a method very similar to that used for the squares; but as two series of differences have to be added, in the cubes, the operation is somewhat more complex.

RULE.—Find the cubes of the first two numbers, and subtract the less from the greater. Then, multiply the less of the two numbers cubed by 6, add the product, with the addition of

6 as a constant quantity, to the difference; and thus continue the first series of differences.

For the second series of differences, bring down, in a separate column, the cube of the higher of the above numbers, and add the difference to it. The amount will be the cube of the next general number.

Example.—Required the cubes of 1001, 1002, 1003, and 1004.

First Series of Differences.

Per Table.
$1000^3 = 1000000000$
$999^3 = 997002999$
2997001 diff.
$999 \times 6 + 6 =$ 6000
3003001 diff. of 1000.
$6000 + 6 =$ 6006
3009007 diff. of 1001.
$6006 + 6 =$ 6012
3015019 diff. of 1002.
$6012 + 6 =$ 6018
3021037 diff. of 1003.

Second Series of Differences.

Then, 1000000000 cube of 1000
Diff. for 1000 = 3003001
1003003001 cube of 1001
Diff. for 1001 = 3009007
1006012008 cube of 1002
Diff. for 1002 = 3015019
1009027027 cube of 1003
Diff. for 1003 = 3021037
1012048064 cube of 1004

To find the Cube or Square Root of a higher Number than is contained in the Table.

Rule.—Refer to the Table, (page 264,) and seek in the column of squares or cubes, the number nearest to that number whose root is sought, and the number from which that square or cube is derived will be the answer required, when decimals are not of importance.

Example I.—Required the square root of 542869.

In the Table of Squares, the nearest number is 543169; and the number from which that square has been obtained is 737.

Therefore, $\sqrt{542869} = 737$ nearly, Ans.

Example II.—Required the cube root of 419684381.

In the Table of Cubes, the nearest number is 420189749, and the number opposite is 749.

Therefore, $\sqrt[3]{419684381} = 749$ nearly, Ans.

To find more correctly the Cube Root of a higher Number than is contained in the Table.

Rule.—Ascertain, by the Table, (page 264,) the nearest cube number to the number given, and call it the assumed cube.

Multiply the assumed cube, and the given number, respectively, by 2; to the product of the assumed cube add the given number, and to the product of the given number add the assumed cube.

Then, by proportion, as the sum of the assumed cube is to the sum of the given number, so is the root of the assumed cube to the root of the given number.

Example.—Required the cube root of 412568555.

Per Table, the nearest number is 411830784; and its cube root is 744.

Therefore, $411830784 \times 2 + 412568555 = 1236230123$.

And, $412568555 \times 2 + 411830784 = 1236967894$.

Hence, as 1236230123 : 1236967894 : : 744 : 744·369 very nearly, Ans.

TABLE OF THE FOURTH POWER OF NUMBERS.

No.	4th Power.	No.	4th Power.	No.	4th Power.	No.	4th Power.
1	1	51	6765201	101	104060401	151	519885601
2	16	52	7311616	102	108243216	152	533794816
3	81	53	7890481	103	112550881	153	547981281
4	256	54	8503056	104	116985856	154	562448656
5	625	55	9150625	105	121550625	155	577200625
6	1296	56	9834496	106	126247696	156	592240896
7	2401	57	10556001	107	131079601	157	607573201
8	4096	58	11316496	108	136048896	158	623201296
9	6561	59	12117361	109	141158161	159	639128961
10	10000	60	12960000	110	146410000	160	655360000
11	14641	61	13845841	111	151807041	161	671898241
12	20736	62	14776336	112	157351936	162	688747536
13	28561	63	15752961	113	163047361	163	705911761
14	38416	64	16777216	114	168896016	164	723394816
15	50625	65	17850625	115	174900625	165	741200625
16	65536	66	18974736	116	181063936	166	759333136
17	83521	67	20151121	117	187388721	167	777796321
18	104976	68	21381376	118	193877776	168	796594176
19	130321	69	22667121	119	200533921	169	815730721
20	160000	70	24010000	120	207360000	170	835210000
21	194481	71	25411681	121	214358881	171	855036081
22	234256	72	26873856	122	221533456	172	875328256
23	279841	73	28398241	123	228886641	173	895745041
24	331776	74	29986576	124	236421376	174	916636176
25	390625	75	31640625	125	244140625	175	937890625
26	456976	76	33362176	126	252047376	176	959512576
27	531441	77	35153041	127	260144641	177	981506241
28	614656	78	37015056	128	268435456	178	1003875856
29	707281	79	38950081	129	276922881	179	1026625681
30	810000	80	40960000	130	285610000	180	1049760000
31	923521	81	43046721	131	294499921	181	1073283121
32	1048576	82	45212176	132	303595776	182	1097199376
33	1185921	83	47458321	133	312900721	183	1121513121
34	1336336	84	49787136	134	322417936	184	1146228736
35	1500625	85	52200625	135	332150625	185	1171350625
36	1679616	86	54708016	136	342102016	186	1196883216
37	1874161	87	57289761	137	352275361	187	1222830961
38	2085136	88	59969536	138	362673936	188	1249198336
39	2313441	89	62742241	139	373301041	189	1275989841
40	2560000	90	65610000	140	384160000	190	1303210000
41	2825761	91	68574961	141	395254161	191	1330863361
42	3111696	92	71639296	142	406586896	192	1358954496
43	3418801	93	74805201	143	418161601	193	1387488001
44	3748096	94	78074896	144	429981696	194	1416468496
45	4100625	95	81450625	145	442050625	195	1445900625
46	4477456	96	84934656	146	454371856	196	1475789056
47	4879681	97	88529281	147	466948881	197	1506138481
48	5308416	88	92236816	148	479785216	198	1536953616
49	5764801	99	96059601	149	492884401	199	1568239201
50	6250000	100	100000000	150	506250000	200	1600000000

COAL AND IRON.*

Coal and Iron rank foremost in the list of minerals, on account of their extensive production and value. The area of the British coal-fields is estimated at 4,250,000 acres; and no less than 64,661,000 tons of coal were raised in the United Kingdom in the year 1854, valued at £14,975,000. Of this sum, 47,422,000 tons were raised in England; 9,643,000 in Wales; 7,448,000 in Scotland; and 148,000 in Ireland.

The area of the coal-fields of France is about six times less than that of Great Britain, whilst their production is sixteen times less.

The total number of collieries in the United Kingdom in 1854 was 2327. Of these, 1704 were situated in England; 306 in Wales; 368 in Scotland; and 19 in Ireland. The average number of tons raised to each workman employed in the United Kingdom, in 1854, was 293; in France, in 1852, the average was only 136 tons to each workman engaged.

PIG-IRON.

The production of Pig-iron in the United Kingdom exceeds that of the principal, and, in fact, of the whole European nations put together; and even if the produce of the United States, which ranks next in amount to that of our own, were thrown into the scale, the balance would still turn in favour of this country.

The counties in which the manufacture of pig-iron is carried on to the greatest extent are those of Staffordshire, Northumberland, Durham, North Yorkshire, and Shropshire. Scotland and Wales also furnish large supplies; but the total make in Scotland or Wales, taken separately, falls short of that produced annually in the county of Stafford alone.

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* Manufacture of Wrought-Iron, by the Flame of Pit-coal, in Puddling Furnaces.

Henry Cort was the inventor of two processes, secured to him by Letters Patent, in 1783 and 1784.

The first process effected the cheap manufacture of wrought-iron by the flame of pit-coal in the puddling furnace: the second process, was the rolling of this cheap wrought-iron through grooved rollers. These operations enabled the manufacturer to produce twenty tons of bar-iron in the same time, and with the same labour, previously required to manipulate one ton of inferior quality by the tedious operation of forging under the forge hammer.

At his "*little mill at Fontley*" was produced the *first* bar-iron from the puddling furnace. Two millions of tons of bar-iron are now manufactured yearly in England, from native materials, by the above processes, effecting a saving of twenty millions of pounds sterling. Previous to this, iron, in bars, was imported from Russia and Sweden, at an average price of £35. per ton, and re-worked under the forge hammer into sizes suited to the requirements of the times.

The following Table shows the increase in this branch of the iron industry in 1854, as compared with 1825:—

DISTRICTS.	No. of Iron Works.		Furnaces in Blast.		Tons of Pig-Iron produced.	
	1825.	1854.	1825.	1854.	1825.	1854.
Staffordshire	54	72	81	166	171,735	847,600
Shropshire	23	13	36	28	86,320	124,800
Yorkshire	14	14	22	21	35,308	73,444
Derbyshire	9	13	14	25	19,184	127,500
North Wales	9	7	8	9	13,100	32,900
South Wales	37	48	82	121	223,520	750,000
Northumberland, Durham, and North Yorkshire	...	23	...	59	...	275,000
Cumberland and Lancashire	13	2	2	3	3,000	20,000
Gloucestershire	...	4	...	5	...	21,990
Scotland	9	32	17	118	29,200	796,604
Total	168	228	262	555	581,367	3,069,838

The quantity of iron ore required to make a ton of pig-iron varies according to quality in the different counties: thus, for instance, in Northumberland and Durham, 4 tons is stated to be about the average proportion; in Yorkshire and Derbyshire, 3 to 3½ tons; and in Shropshire and Staffordshire, only 3 tons.

In the year 1851, the production of pig-iron in the United States amounted to 564,755 tons; and in 1854, to 700,000 tons. In France, in the year 1852, the total produce of pig-iron was 429,677 tons. The next in importance stands that of Prussia, which is, however, considerably less than that of France, and, therefore, not worth including here. The production of Russia, Sweden, Belgium, and Austria, are in each instance less than that of France. A remarkable fact is, the great difference in the average price of this article in these countries. In the United Kingdom, in 1854, the average price was £3. 1s. 9d. per ton; in the United States, in 1851, £4. 12s.; and in France, in 1852, no less than £5. 6s.

The lowest point that rails have touched during the war (1854 and 1855), is £6. 5s. per ton; and Scotch pigs, 53s. 6d. per ton.

The Exports of iron for the year 1855, as compared with the two preceding years, show the following results, all descriptions being reduced to pig:—

1853.	1854.	1855.
Tons.	Tons.	Tons.
1,814,231	1,735,136	1,619,205

ENGLISH BLAST FURNACES AND ROLLING MILLS NORTH OF THE HUMBER—MARCH 1, 1856.*

FIRM.	NAME OF WORKS.	FURNACES.			WEEKLY PRODUCE.	
		In.	Out.	Total.	Pigs.	Mallea. Iron.
					Tons.	Tons.
Derwent Iron Company.	Consett	5	2	7	600	450
	Crookhall	7	...	7	840	......
	Bishopwearmouth	...	...	......	......	400
	Bradley	4	...	4	500	......
Bolckow & Vaughan	Witton Park ...	4	...	4	600	300
Ditto	Middlesbro'	3	...	3	450	300
Ditto	Eston..............	6	...	6	900	......
Ditto (Elwyn & Co.) ...	Eston..............	3	...	3	430	......
Bell Brothers	Clarence	3	...	3	400	......
Ditto	Felling	2	...	2	260	......
Ditto	Wylam	1	...	1	120	......
Losh, Wilson, & Bell......	Walker	4	1	5	560	300
John Carr & Co.............	Tyne Main	2	...	2	240	......
Weardale Iron Company...	Tow Law	4	2	6	500	......
Ditto	Stanhope	...	1	1	......	......
Ditto	Tudhoe	...	...	......	......	300
James Wakinshaw	Monkwearmouth	...	...	......	......	60
Hawks, Crawshay, & Sons	Gateshead.........	...	...	......	......	250
Tyne Iron Company	Leamington	2	...	2	200	40
Hareshaw Iron Company ..	Hareshaw	...	3	3	......	......
Bedlington Iron Company	Bedlington	...	2	2	......	......
Birtley Iron Company ...	Birtley	2	1	3	200	60
Gilkes, Wilson, & Co. ...	Middlesbro'	4	...	4	500	......
Cochrane & Co.	Ormsby...........	2	2	4	250	......
B. Samuelson & Co.	Eston..............	3	...	3	400	......
South Stockton Iron Co. ..	Stockton	3	...	3	400	......
South Durham Iron Co. ..	Darlington	2	...	2	240	......
Snowdon & Hopkins	Middlesbro'	...	...	......	......	200
West Hartlepool Iron Co.	West Hartlepool.	...	3	3	......	......
	Total	66	17	83	8590	2660

* SMOKE-BURNING IN IRON-WORKS.

Various attempts have been made to effect this object,—or rather, the *prevention* of smoke—in the operations of the Iron Manufacture; and no doubt this is a highly desirable object, no less in a sanitary than in a commercial point of view, especially in the latter, when smoke prevention generally is regarded as synonymous with saving of fuel: hitherto, however, without avail, consistently with reference to the non-deterioration of the iron so produced, and the Legislature has wisely exempted iron-works from interference in this respect.

The manipulation of the iron, in the Puddling Furnace especially, is of so delicate a nature, that if the iron be spoiled in that process, no after-process or operation can recall its quality.

The comparison of Selling Rates for iron at this season, (March 28th,) for three years, is as follows:—

		1854.			1855.			1856.		
		£.	s.	d.	£.	s.	d.	£.	s.	d.
Welsh Rails	F.o.b. Cardiff	7	15	0	6	15	0	8	5	0
Welsh Bars	„ Cardiff	8	5	0	6	15	0	8	5	0
Staffordshire Plates	„ Liverpool	13	0	0	10	10	0	11	0	0
Scotch Pigs (mixed Nos.)	„ Glasgow	3	14	3	2	18	6	3	8	0
Cleveland Pigs (ditto)	„ Sunderland	3	12	6	3	0	0	3	7	6

NOTE OF SHIPMENTS AND STOCKS OF SCOTCH PIG-IRON FOR THE YEARS 1850 TO 1855 INCLUSIVE.

	1850.	1851.	1852.	1853.	1854.	1855.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Foreign Shipments for the year	134,556	192,676	224,070	314,270	283,900	249,000
Coastwise ditto ditto	190,000	260,080	199,950	305,650	298,100	293,000
Total Shipments for the year	324,556	452,756	424,020	619,920	582,000	542,000
Stock, Dec. 31st	275,000	350,000	450,000	220,000	133,000	100,000
Furnaces in Blast, Dec. 31st	105	115	113	114	115	121

The total exports of British iron, for the year 1855, shows a decrease, in the year, of £2,506,991. declared value, equivalent to 104,708 tons pig-iron.

COPPER, TIN, AND LEAD.

In the year 1800, the quantity of Tin produced amounted to 2522 tons; this amount was augmented to 4170 tons in 1825, and to 5768 tons in 1854. The amount of Copper raised in the year 1820, was 8127 tons; in the year 1834, 14,042 tons; and in 1854, 13,042 tons. It will be observed that there has been a steady increase in the produce of tin, whilst the amount of copper has somewhat varied, it being 1000 tons less in 1854 than in 1834.

The value of tin and copper produced in the English mines, in each of the years 1801 and 1854, was:—Tin, in 1801, £254,722.; and in 1854, £690,000., or an increase of 171 per cent.: and copper, in 1801, £476,313.; and in 1854, £1,229,807., or an increase of 158 per cent. in 1854 over 1801.

LEAD.

Besides tin and copper, Great Britain produces large supplies of Lead, the amount raised in 1854 being no less than 64,005 tons. With the exception of Spain, no country can enter into competition with Great Britain in the production of this mineral, but a larger per centage of metal is said to be extracted from the lead ores of Continental Europe than from those raised in the United Kingdom.

The following Table of the Production and Value of Minerals in the United Kingdom, in the year 1854, has been extracted from the "Mining Survey:"—

Minerals, &c.	Quantities Produced in 1854.	Value at Place of Production.
		£.
Tin	5,763 Tons	690,000
Copper	13,042 "	1,229,807
Lead	64,005 "	1,472,115
Silver	700,000 Ounces	192,500
Iron (pig)	3,069,838 Tons	9,500,000
Coal (at pits)	64,661,401 "	14,975,000
Zinc	....	16,500
Arsenic, &c.	....	500,000
	Total	£28,575,922

The Table below has been compiled for the purpose of showing the quantities of the principal kinds of Metals, in the unmanufactured state, Imported and Exported in each of the years 1820 and 1854:—

—	Total Imports.		Exports of British Produce.		Exports of Foreign Produce.	
	1820.	1854.	1820.	1854.	1820.	1854.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	..	..	249,119	4,119,712	..	..
Iron, in bars, unwrought	9869	41,745	46,469	604,662	3909	4341
Do. Pig	1	899	5,631	293,482	..	..
Steel, unwrought	..	1,409	438	20,793	..	1340
Copper Ore	..	50,941	....	....	..	..
Do. Regulus	..	6,351	....	....	..	..
Do. Unwrought	72	1,597	2,057	3,040	..	857
Do. Wrought, sheet, nails, &c.	..	710	1,906	5,111	..	..
Tin, in blocks, &c.	65	2,551	1,292	1,405	152	668
Lead, pig and sheet	5	11,858	18,300	17,857	5	199

STATISTICS

OF THE

SCOTCH IRON TRADE.

Extracted, principally, from the Trade Circular issued by Thomas Thorburn, Esq., Glasgow.

PRODUCTION.

The make of Pig-Iron, *in Great Britain, as nearly as could be arrived at, was as follows :—*

	Furnaces.	Tons.	Tons.	Annual
In 1740, by	59	17,350	294	Average Production per Furnace.
1760,	...	22,000		„
1788,	85	68,000	800	„
1796,	121	125,000	1033	„
1806,	169	250,000	1479	„
1820,	...	400,000		„
1827,	284	690,000	2429	„

Scotland alone Produced

In 1827, by	18	36,000	2000	„
1840,	64	241,000	3765	„
1845,	88	475,000	5397	„
1846,	98	570,000	5816	„
*1847,	100	510,000	5100	„
1848,	103	580,000	5631	„
1849,	112	690,000	6160	„
*1850,	105	595,000	5666	„
1851,	112	760,000	6785	„
1852,	113	775,000	6858	„
1853,	114	710,000	6228	„
1854,	117	770,000	6581	„
1855,	121	825,000	6818	„
1856,	126	832,000	6603	„
1857,	129	448,000	to June 30th.	

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* In 1847 a Strike took place among the Miners, which lasted from July to September, and in 1850 from May to July.

FURNACES BUILT AND IN BLAST, IN THE YEARS—

Furnaces Erected.	1796.		1823.		1846.		1847.		1848.		1849.		1850.		1855.		1856.	
	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.	In Blast.	Out of Blast.
a Gartsherrie,...	...	...	...	...	14	2	16	...	16	...	16	...	15	1	15	1	15	
b Eglinton, ...	...	...	...	...	3	...	...	3	2	2	3	1	3	1	5	...	5	
b Blair, ...	...	...	...	...	8	...	...	5	...	5	...	5	...	5	2	3	3	
b Lugar, ...	...	...	...	...	2	...	...	4	3	1	4	...	4	...	3	1	2	
b Muirkirk,......	2	...	3	...	2	2	...	4	2	2	1	2	2	1	3	...	1	
b Glengarnock, .	...	...	...	...	4	1	6	1	7	2	9	...	8	1	7	2	7	
a d Ardeer, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	...
a Carnbroe,......	...	...	...	...	3	3	3	3	4	2	3	3	2	4	4	2	4	2
a Coltness, ...	...	...	...	...	5	1	4	2	5	1	6	...	5	1	6	...	8	...
c Dalmellington	...	...	...	...	...	...	...	...	1	1	3	...	3	...	3	1	4	...
a Monkland,....	...	...	...	...	7	2	9	...	9	...	9	...	9	...	8	1	8	1
a Langloan,.....	...	...	...	...	6	...	5	1	6	...	6	...	6	...	5	1	5	1
a Summerlee, ...	...	...	...	...	5	1	5	1	6	...	6	...	5	1	6	...	6	...
a Dundyvan, ...	...	...	...	...	8	1	8	1	9	...	8	1	7	2	6	3	6	2
a Clyde, ...	3	...	3	...	5	1	5	2	5	2	6	1	4	3	5	2	5	4
a Govan, ...	...	...	...	...	3	3	4	2	4	2	4	2	4	2	4	2	4	2
a Calder, ...	...	...	3	...	5	3	3	5	5	3	5	3	5	3	4	4	5	3
a Omoa, ...	2	...	2	...	3	1	4	...	3	1	4	...	3	1	3	1	3	1
a Shotts,..........	...	...	1	...	3	1	3	1	3	1	4	...	3	1	3	1	3	1
a Castlehill,.....	...	...	...	...	2	...	2	1	...	3	2	1	2	1	3	...	3	...
b Portland,......	...	...	...	...	...	...	...	...	...	...	2	...	2	...	4	...	4	...
d Kinneil, ...	...	...	...	...	4	...	4	...	4	...	4	...	4	...	3	1	4	...
e Forth, ...	...	...	...	...	4	...	4	2	4	1	4	2	5	1	6	...	6	...
h Lochgelly, ...	...	...	...	...	...	...	...	...	2	...	1	1	...	2	2	...	3	...
b Lumfinnan,...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
f Carron,.........	4	...	5	...	3	2	3	1	2	3	2	3	2	1	3	...	3	1
g Devon, ...	2	...	3	...	1	1	1	2	1	2	1	1	2	...	1	1	1	2
h Almond, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...
h Gladsmuir, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
a Garscube,......	...	...	...	...	2	...	...	2	...	2	...	2	...	2	...	2	...	2
b Nithsdale, ...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	3	...	3
	...	...	...	...	97	25	89	43	103	36	113	31	105	37	121	34	126	34
Total Furnaces,	17	...	22	...	122		132		139		144		142		155		160	

Nearest Shipping Ports.

a Glasgow.
b Troon or Ardrossan.
c Ayr.
d Bo'ness, Frith of Forth.
e Charleston, do.
f Grangemouth, do.
g Alloa, Frith of Forth.
h Burntisland, do.

FURNACES IN BLAST DURING THE YEAR 1856.

January, ...	119	May, ...	*86	September, .	123
February, ...	119	June,.........	105	October,......	121
March, ...	119	July,.........	115	November,...	124
April,.........	100	August,......	122	December,...	126

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* Owing to the Strike among the Colliers and Miners, several Furnaces were put out of Blast.

COMPARATIVE VIEW OF EXPORTS OF PIG-IRON.

Shipments.	1830.	1845.	1846.	1847.	1848.	1849.	1850.
France, ...	3,952	10,674	35,577	24,836	5,859	8,453	10,491
Jersey & Guernsey,	161	130	268	95	329	280	495
Germany, ...	1,788	7,811	47,558	49,254	41,417	21,087	31,349
Denmark, Sweden, and Norway,...	157	624	3,688	5,019	7,054	4,549	7,712
Russia, ...	32	20	...	962	1,220	...	370
Turkey and Egypt,.	143	565	275	531	931	650	803
Italy and Austria,..	749	1,977	6,066	6,266	4,642	6,742	6,672
Spain, ...	5	212	2,703	1,703	1,444	2,534	4,116
Portugal, ...	5	198	435	283	535	822	844
South America, ...	55	250	538	1,343	1,980	4,216	1,645
West Indies,.........	100	100	170	215	161	188	219
New South Wales,..	...	234	56	891	641	965	1,060
British America, ...	465	5,391	7,304	6,327	4,198	7,235	10,091
United States, ...	1,319	25,915	13,918	44,993	90,235	94,212	57,509
China, ...	...	...	25	175	575	215	320
East Indies, ...	...	500	526	567	893	1,035	740
Africa, ...	...	70	...	...	...	...	120
TotalShipments,(Tons)	8,931	54,671	119,107	143,460	162,114	153,183	134,556

COMPARATIVE VIEW, CONTINUED.

Shipments.	1851.	1852.	1853.	1854.	1855.	1856.
Germany, Holland, Denmark, Sweden, and Norway, ...	55,700	74,500	77,800	81,623	90,478	100,540
France, ...	10,650	18,280	29,250	31,193	67,427	63,530
Italy, ...	9,400	7,400	18,500	8,189	8,769	6,578
Spain, Portugal, and other European countries,...........	8,800	5,560	6,840	11,362	10,118	12,098
United States and British North America,	102,400	112,500	180,300	148,523	63,871	69,807
South America, India, Australia, &c., ...	5,660	6,130	5,330	3,063	3,657	6,185
Total Foreign,......	192,610	224,370	318,020	283,903	244,320	258,738
Coastwise, and per Rail to England, .	260,090	210,530	316,980	301,097	297,680	243,262
Total Shipments, (Tons)	452,700	434,900	635,000	585,000	542,000	502,000
Local Consumption, ...	242,300	245,100	300,000	300,000	300,000	340,000

TONS SHIPPED COASTWISE.

1846–192,893; 1847–227,005; 1848–227,870; 1849–221,943; 1850–190,000.

Exported Foreign and Coastwise from Glasgow, Frith of Forth, Ayrshire Ports, and per Railway,...............	502,000 Tons.
Consumed in Local Foundries and Malleable Iron Works here,	340,000
Total Deliveries,..............	842,000
Deduct Decrease in Stock, ...	10,000
Production in 1856, ...	832,000

AVERAGE AND COMPARATIVE VIEW OF PRICES OF MIXED NUMBERS OF PIG-IRON,

For the last Twenty-six Years, per Ton;—Free on Board at Glasgow.

1830,	£5	0	0	1835,	£4	10	0	1840,	£3	15	0	1845,	£4	0	2
1831,	4	10	0	1836,	6	15	0	1841,	3	0	0	1846,	3	11	11
1832,	4	10	0	1837,	4	0	0	1842,	2	10	0	1847,	3	5	4
1833,	4	0	0	1838,	4	0	0	1843,	2	16	0	1848,	2	4	4
1834,	4	5	0	1839,	4	10	0	1844,	2	14	9	1849,	2	5	6

	1850.		1851.		1852.		1853.		1854.		1855.		1856.		1857.	
	s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
January, ..	49	10	43	6	36	6	68	6	76	2	66	10	76	3	73	6
February, .	47	5	43	0	36	3	54	10	78	0	61	2	69	10	73	9
March, ...	44	4	41	8	36	5	52	11	77	8	57	10	68	4	75	5
April, ...	43	0	41	4	36	0	52	8	79	5	60	0	72	11	75	0
May, ...	45	0	40	1	38	1	50	10	85	2	67	6	76	2	76	9
June, ...	45	6	39	5	40	0	52	9	88	8	75	8	75	3	78	0
July, ...	44	6	38	9	44	6	55	1	84	11	73	10	72	9	...	
August, ...	43	8	38	1	45	0	64	1	83	5	78	0	73	0	...	
September,	42	6	39	0	48	0	63	6	82	7	81	0	71	6	...	
October, ...	42	6	39	3	56	6	66	6	81	7	77	0	68	5	...	
November,	43	0	39	3	58	0	78	2	71	9	76	6	71	3	...	
December,	43	6	38	0	69	9	78	10	66	10	76	10	72	6	...	
Average,	44	7	40	1	45	5	61	7	79	8	71	0	72	4		

PRODUCTION OF MALLEABLE IRON.

	Estimated at		Estimated at		Estimated at
1845, ...	35,000 Tons.	1849, ...	80,000 Tons.	1853, ...	120,000 Tons.
1846, ...	45,000 „	1850,* ...	70,000 „	1854, ...	110,000 „
1847, ...	60,000 „	1851, ...	90,000 „	1855, ...	110,000 „
1848, ...	90,000 „	1852, ...	90,000 „	1856, ...	125,000 „

AVERAGE PRICE OF BAR-IRON, PER TON.

1813, ...	£13	6	8	1828, ...	£7	18	4	1843, ...	£5	2	1
1814, ...	13	18	4	1829, ...	6	16	8	1844, ...	6	2	6
1815, ...	13	13	4	1830, ...	6	3	9	1845, ...	9	10	0
1816, ...	12	2	6	1831, ...	5	13	9	1846, ...	9	15	0
1817, ...	10	12	6	1832, ...	5	13	4	1847, ...	8	5	0
1818, ...	12	1	8	1833, ...	6	12	11	1848, ...	5	10	0
1819, ...	12	5	0	1834, ...	6	18	9	1849, ...	5	17	6
1820, ...	10	13	4	1835, ...	6	10	0	1850, ...	5	9	0
1821, ...	8	18	4	1836, ...	10	12	6	1851, ...	5	7	6
1822, ...	8	1	3	1837, ...	9	1	3	1852, ...	10	10	0
1823, ...	8	0	0	1838, ...	9	4	7	1853, ...	9	7	6
1824, ...	8	19	2	1839, ...	9	15	0	1854, ...	9	15	0
1825, ...	12	14	2	1840, ...	8	7	6	1855, ...	8	15	0
1826, ...	9	15	10	1841, ...	7	5	0	1856, ...	8	17	6
1827, ...	9	7	6	1842, ...	5	19	7				

Rails,............... *5s.* @ *7s. 6d.* extra to Prices of Bars.
Sheets, ... 40*s.* do. do.
Angle Iron, ... 30*s.* do. do.
Hoops, ... 40*s.* do. do.
Best Iron,......... 25*s.* to 30*s.* per Ton extra.

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* On account of the Miners' Strike the works remained idle from June to 1st August.

TABLE OF DUTIES,

LEVIABLE IN

AUSTRIA.

		Export.			*Import.*
Pig-Iron	per Ton,	£1 7 6		......	£4 0 0
Bar-Iron and Rails	do.	0 7 6		......	7 0 0

Do. under 1⅝ by 7/16—*prohibited, or such Duties as are prohibitory.*

Steel (cast)	per Ton,	15 0 0

BELGIUM.

Pig-Iron,	per 1000 Kils. = 2205 lbs. English,		135 f.
Bar-Iron,	do.	do.	150 f.
Plates and Sheets,	do.	do.	225 f.
Old Iron, not Scrap,	do.	do.	60 f.
Scrap Iron,	do.	do.	20 f.

FRANCE.

		National Flag.	*Foreign Flag.*
Pig Iron,	per 100 Kils.,	4 Frs. ...	4 Frs. 40 Cts.
Bar Iron Plates, of 458 Millemetres and more,	Do.	10 „	
Do., of 213 to 458 Millemetres inclusive,	Do.	12 „	
Do., less than 213 Millemetres,	Do.	14 „	
Square Bar Iron, of 22 Millemetres	Do.	10 „	
Do., of 15 to 22 Millemetres,	Do.	12 „	
Do., less than 15 Millemetres,	Do.	14 „	

Iron Bars, grooved, called Rails, same duties as Drawn or Rolled Iron, according to their dimensions.

Manufactured Iron,	30 Francs,	per 100 Kilogs.
Sheet Iron,	22 Francs,	„
Steel Bars, Natural or Cast,	33 Francs,	„
Rolled Iron, Do.,	30 Francs,	„

100 Kilogrammes = 220¼ lbs. avoirdupois.

GIBRALTAR, MALTA, AND IONIAN ISLANDS, *in British, Ionian, Austrian, and Greek Flags*—

		Import.
Bars,	per 100 lbs.	£0 1 7
Hoops,	do.	0 2 2
Sheets,	do.	0 2 9

HANOVER AND OLDENBURG.

		Import.			*Import.*
Pig-Iron—*free*			Tin Plates,	per Box,	£0 2 3
Castings,	per Ton,	£3 2 6	Iron Wire,	per Ton,	6 5 0
Bar-Iron, Wrought or Unwrought,	per Ton,	3 2 6	Nails,	do.	12 10 0
Plates, Sheets, & Hoops,	do.	1 1 0	Steel (cast),	do.	6 5 0

HOLLAND.

Pig-Iron, *ad Valorem*,	½ per Cent.	Bar-Iron, *ad valorem.*,	½ per Cent.
Wrought-Iron & Castings	6 do.	Plates, Nails, and Wire,	2 do.

NAPLES.

		Import.		
Pig-Iron,..	per Ton,	£7	10	0
Bar-Iron,.........	do.	7	10	0
Sheets, Hoops, &c.	do.	7	13	10
Tin Plates, ...	per Box,	0	13	6

PORTUGAL.

		Import.		
Pig, Bar, and Sheet Iron,	per Quintal,	£1	17	11
Hoops,.........	do.	1	17	11
Nails, ...	do.	1	17	11

PRUSSIA, BAVARIA, SAXONY, WURTEMBERG, BADEN, OR THE ZOLLVEREIN.

Pig-Iron, ...	per Ton,	£1	0	0
Bar-Iron & Rails, rolled,	do.	4	10	0
Under 1$\frac{3}{8}$ by $\frac{7}{16}$	do.	7	10	0
Wrought-Iron and Fine Castings, ...	do.	9	0	0
Hoops & Sheets,	per Ton,	£7	10	0
Nails, ...	do.	18	0	0
Wire, ...	do.	12	0	0
Steel (cast),......	do.	12	0	0

RUSSIA.

Iron, in 1½ Inch Bars and Rails, &c., Old Wrought Iron, ...	2 Frs.	0 Cts.	per Pood.
Iron under 1½ Inch,......................	2 Frs.	80 Cts.	„
Sheet Iron for Boilers,..................	3 Frs.	60 Cts.	„
Pig Iron and old Cast Iron,............	0 Frs.	60 Cts.	„
Zinc, in Blocks,..........................	2 Frs.	40 Cts.	„
Zinc, in Sheets,..........................	3 Frs.	60 Cts.	„

The Russian Pood is equal to 36 English lbs. avoirdupois.

SPAIN.

		National Flag.				*Foreign Flag.*		
Pig-Iron, ...	per Ton,	£1	18	0	@	£2	4	0
Bar-Iron, ...	do.	9	0	0	@	11	0	0
Do. under 1$\frac{3}{8}$ by $\frac{7}{16}$, ...	do.	11	0	0	@	13	0	0
Wrought-Iron and Castings, ...	do.	13	10	0	@	16	10	0
Sheet-Iron,................................	do.	3	5	0	@	4	15	0
Hoops, ...	do.	7	15	6	@	9	10	0
Tin-Plates,................................	per Box,	0	14	0	@	0	18	0
Iron Wire,................................	per Ton,	8	0	0	@	11	0	0
Nails, to 2 inches,........................	do.	14	5	0	@	18	5	0
Do. above do...........................	do.	11	5	0	@	14	0	0

SWEDEN.

Pig-Iron—*prohibited.*				
Castings, except Implements of War, ...	per Ton,	£4	12	2
Wrought-Iron, Anchors, &c.	do.	5	3	4
Bar-Iron, according to size, per Skippund, 93$\frac{26}{100}$ lbs. on official value, from 5*s.* @..		0	8	4
Bar-Iron, under 3-8ths of an inch, or exceeding 1 Cwt.—*prohibited.*				
Sheet-Iron, each Sheet not exceeding 20 lbs.	per Ton,	6	18	6

UNITED STATES.

30 per Cent. *ad Valorem,* on all descriptions.

POSTAGE RATES.

Inland Letters.*—The rate of postage on all inland letters is regulated by weight, irrespective of distance, and is as follows:—

If paid in advance—Weighing	not more than ½ oz.	1*d.*
,,	more than ½ oz. but not exceeding 1 oz.,	2*d.*
,,	more than 1 oz. ,, ,, 2 oz.,	4*d.*
,,	more than 2 oz. ,, ,, 3 oz.,	6*d.*

and so on; twopence being charged for every additional ounce.

As a general rule, the postage, if not paid in advance, is doubled; and if the payment in advance be insufficient, double the deficiency is charged. An inland letter weighing more than ½ an oz., and not exceeding 1 oz., if bearing a penny stamp only, is, on delivery, charged twopence. The unpaid *additional* postage on re-directed letters, however, is not doubled, being the same as if such postage were prepaid. Unless three-quarters, at least, of the postage of a letter weighing more than 4 oz. be prepaid, the letter is not forwarded, but a notice of its detention is forwarded to the sender, or, failing him, to the person to whom it is addressed.

Addresses to the Queen and Petitions to Parliament.—Petitions and Addresses to Her Majesty, forwarded direct, are exempt from postage; and such petitions and addresses, as also petitions to either House of Parliament, if sent to a member of either House, are also exempt, provided they do not weigh more than 2 lbs., and are without covers, or are in covers open at the sides. No letter or other enclosure, however, must be inserted, and if one be found, such enclosure, unless it bear the proper number of postage stamps, will be charged as an unpaid letter.

Book Post.—At the following charges, and on the subjoined conditions, Book Packets may be sent by the post to any place within the United Kingdom.

Weighing	not more than 4 oz.,	1*d.*
,,	more than 4 oz. and not exceeding 8 oz.,	2*d.*
,,	more than 8 oz. ,, ,, 16 oz.,	4*d.*
,,	more than 1 lb. ,, ,, 1½ lb.,	6*d.*

and so on, 2*d.* being charged for every additional ½ lb. or any less weight.

1.—The postage must be prepaid in full by means of postage stamps affixed outside the packet or its cover.

2.—Every packet must be sent either without a cover, or in a cover open at the ends or sides; so as to admit of the enclosures being removed for examination.

3.—A book-packet may contain any number of separate books or other publications, prints, or maps, and any quantity of paper, parchment, or vellum; to the exclusion, however, of written letters, whether sealed or open. And the books or other publications, prints, maps, &c., may be either printed, written, or plain, or any mixture of the three. Further, all legitimate binding, mounting, or covering of a book, publication, &c., or of a portion thereof, will be allowed, whether such binding, &c., be loose or attached; as also rollers, in the case of prints or maps; markers (whether of paper or otherwise), in the case of books; and, in short, whatever is necessary for the safe transmission of literary or artistic matter, or usually appertains thereto; but no patterns or books of patterns can be allowed.

4.—No book-packet may contain any written letter, closed or open, or any enclosure sealed or otherwise closed against inspection; nor must there be any letter, nor any communication of the nature of a letter written in any such packet or in or upon its cover. Entries, however, merely stating who sends the book, &c., or to whom it is given, are not regarded as a letter. Indeed, as respects the name and address of the sender, not only is the writing permitted but recommended; so that if the cover come off or for any other reason the packet cannot be forwarded, it may be returned.

5.—No book-packet can be received, if it exceeds two feet in length, width, or depth.

6.—Any packet which shall not be open at the ends or sides, or shall have any written letter or any communication of the nature of a letter written in it, or upon its cover, will be charged with the "unpaid" or double letter postage.

7.—If a packet be found to contain any written letter, whether closed or open, or any enclosure sealed or otherwise closed against inspection, or any other unauthorised enclosure, the letter or enclosure will be taken out and forwarded to the address on the packet, charged with the full postage, as an unpaid letter, together with an additional rate of 4*d.*; and the remainder of the packet, if duly prepaid with stamps, will then be forwarded to its address.

8.—If a packet be not sufficiently prepaid with stamps, but nevertheless bear a stamp of the value of 1*d.*, it is forwarded, charged with the deficient book-postage, together with an additional rate of 4*d.*; but any packet which bears no postage stamp is charged with the "unpaid" or double letter postage.

9.—In every case in which the postage chargeable under these regulations is greater than the letter rate, the latter postage is substituted.—No. 5, 1st July, 1857.

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*Inland Letters are those which pass between places in the United Kingdom, including the Isle of Man, the Orkney, Shetland, Scilly, and Channel Islands.

COLONIAL AND FOREIGN WEIGHTS AND MEASURES,

Countries.	Weight for gold, silver, &c.	Commercial Weight.	Cloth Measure.	Lineal Measure.
	Troy grains.	Imper. lbs.	Imper. inches.	Imperial.
AUSTRALIA, .	Same as in	Britain.	....	....
AUSTRIA, .	Marc, 4333	Pound, . . 1·2352 Centner, . 123·52 = 100 lbs.	Ell, Vienna, 30·66 ——Trieste— Wool, 26·60 Silk, 25·22	Foot . 12·45 in. Mile, . 4·71 mi.
Austrian Italy, Milan,	Marc, 3627	Pound grosso, 1·682 Libbra or Kilogramme, . 2·20 = 10 Oncie.	Braccio, . 23·42 Metro, . . 39·37 = 10 Palmi.	....
——Venice,	Marc, 3681	Pound grosso, 1·05 Libbra or Kilogramme, . 2·20 = 10 Oncie.	Braccio, . 26·61 (woollen). Metro, . . 39·37 = 10 Palmi.	Foot, . 13·68 in.
BADEN, . .	Marc, 3608	Centner, . . 110·25 = 100 lbs.	Aune, . . 23·62	Foot, . 11·81 in.
BAVARIA, .	Marc, 3609	Pound, . . . 1·04	Ell, . . . 32·80	Foot, 11·667 in.
BELGIUM, .	Same as in	France.	....	....
BRAZIL, . .	Same as in	Portugal.	....	....
BRUNSWICK, .	....	Centner, . 117·37 = 114 lbs.	Ell, . . . 22·46	Foot, . 11·23 in.
BREMEN, .	Marc, 3608	Centner, . 127·44 = 116 lbs.	Ell, . . . 22·76	Foot, . 11·38 in.
Buenos Ayres,	Same as in	Spain.	....	....
CANADA, .	Same as in	Britain.	....	....
Cape of Good Hope, . .	Chiefly the same as Britain	....	....	....
CHINA, . .	Tael, . 580	Catty, . . . 1·33 = 16 Taels. Pecul, . . 133·33 = 100 Catties.	Covid, . . 14·62	Foot, . 13·12 in. Li, . ·36 mi.
DEMERARA, .	Same as in	Britain.	....	....
DENMARK, .	Mark, 3633	Pound, . . 1·1025 Centner, 110·25 = 100 lbs.	Ell, . . . 24·71	Foot, 12·356 in. Mile, . 4·68 mi.
EGYPT, . .	Rottolo, 6654	Rottolo forforo, ·93	Pic, . . . 26·80	....
FRANCE, . .	Gramme, 15·43	Kilogramme, 2·205 = 1000 Grammes. Livre usuel, 1·1025 = ½ Kilogramme. Quintal, . 220·50 = 100 Kilogrammes.	Aune usuelle or Ell = 1-5th metre, 47·251	Pied usuel, 13·12 in. Metre, . 39·37 in. Toise usuelle, 78·74 in. = 2 Metres. Kilometre, ·62 mi. = 1000 Metres. Myriametre, 6·21 mi. = 10 Kilometres. League, 2·42 mi.
Frankfort on the Maine, . .	Marc, 3611	Pound, . . 1·1142 Centner, . 111·42 = 100 lbs.	Ell, . . . 21·54	Foot, . 11·42 in. Mile, . 4·60 mi.
GREECE, . .	Same as in	the metrical system	of France.	....
HAMBURG, . .	Marc, 3608	Pound, . . 1·068 Centner, . 119·616 = 112 lbs.	Ell, . . . 22·58 — Brabant, 27·58	Foot, 11·289 in. Mile, . 4·68 mi.
HANOVER, .	Marc, 3608	Pound, . . . 1·07	Ell, . . . 22·91	Foot, . 11·45 in. Mile, . 6·56 mi.
HOLLAND, .	Wigtj, 15·43	Pound, . . . 2·20 = 1000 Wigtj.	Ell, . . . 39·37	Foot, . 12·356 in. Mijle, . ·62 mi.

WITH THEIR EQUIVALENTS IN THE BRITISH STANDARDS.

Countries.	Land Measure.		Grain Measure.		Liquid Measure.	
		Imper. acres.		Imper. bushels.		Imper. gallons.
AUSTRALIA,	Same as in Britain.		....		....	
AUSTRIA,	Joch,	1·42	Metzen = 4 Viertels Muth = 30 Metzen,	1·691 50·76	Eimer, Fuder=32Eimers,	12·444 398·21
Austrian Italy, Milan,	....		Moggio, Soma or Hectolitre,	4·023 2·75	Brenta,	15·72
——Venice,	....		Stajo, Soma or Hectolitre,	2·2 2·75	Anfora,	114·1
BADEN,	Morgen,	·89	Last = 20 Malters,	82·50	Ohm,	33·01
BAVARIA,	....		Metzen,	1·515	Eimer,	8·12
BELGIUM,	Same as in France.		....		....	
BRAZIL,	Same as in Portugal.		....		100 Medidas,	61·10
BRUNSWICK,	....		Wispel = 4 Scheffels,	34·20	Ahm,	32·28
BREMEN,	....		Last = 40 Scheffels,	78·22	Ohm,	31·56
Buenos Ayres,	Same as in Spain.		....		....	
CANADA,	Same as in Britain.		Same as the former English		Measures.	
Cape of Good Hope,	Chiefly the same as in Britain		....		....	
CHINA.	....		....		....	
DEMERARA,	Same as in Britain.		....		....	
DENMARK,	Toende,	5·5	Barrel or Toende, Last = 12 Toendes,	3·826 45·916	Viertel, Oxhoft=30Viertels	1·701 51·03
EGYPT,	....		Rhebebe,	4·36	....	
FRANCE,	Hectare, = 100 ares.	2·47	Hectolitre = 100 Litres, Boisseau usuel, = ⅛ Hectolitre.	2·75 ·34	Decalitre=10 Litres, Hectolitre,=100Li.,	2·20 22·
Frankfort on the Maine,	....		Malter = 8 Metzen,	3·16	Ohm = 20 Viertels,	31·57
GREECE,	Same as in the		metrical system of France.		....	
HAMBURG,	Morgen,	2·38	Last = 30 Scheffels, Wispel = 10 Scheffels,	87·08 29·03	Ahm=20 Viertels,	31·85
HANOVER,	Morgen,	·64	Last = 96 Hintems,	82·	Ahm = 80Kannen	34·24
HOLLAND,	Morgen, Vierkantebunder,	2·10 ·025	Mudde,=10 Schepels,	2·75	Vat = 100 Kannen,	22·

Countries.	Weight for gold, silver, &c.	Commercial Weight.	Cloth Measure.	Lineal Measure.
	Troy grains.	Imper. lbs.	Imper inches.	Imperial.
India, . . .	Tola, . 180 (Government)	Seer, Government, 2·06 = 80 Tolas. Maund. Govert. 82·28 = 40 Seers.	Guz, Bombay, 27· Guz, Bengal, 36· Covid, Madras 18·6	Mile, Bengal, 1·13mi
Lubec, . .	Marc, 3608	Pound, . . . 1·07	Ell, . . . 22·70	Foot, . 11·346 in.
Malta, . .	Libbra, 4886	Pound, . . 1·745	Canna, . . 81·9	Foot, . 11·167 in.
Mexico, . .	Same as Spain.	....	....	....
Naples, . .	Libbra, 4950	Rottolo, . 1·9642 Cantaro Grosso, 196·42 = 100 Rottoli.	Canna, . 83·05 = 8 Palmi.	Palmo, 10·38 in. Mile, . 1·14 mi.
New Brunswick,	Same as in	Britain.	....	....
Newfoundland,	Same as in	Britain.	....	....
Norway, .	Same as in	Denmark.	....	....
Nova Scotia,	Same as in	Britain.	....	....
Persia, . .	Derham, 151	Batman, . . 6·34	Royal Guerze, 37·21	Parasang, 3·45 mi.
Peru, . .	Same as Spain.	....	....	....
Poland, . .	Marc, 3113	Pound, ... ·89	Ell, ... 22·68	Foot, . 11·34 in. Mile, . 3·45 mi.
Portugal, .	Marc, 3541·5	Pound, . . 1·0119 Arroba = 32lbs. 32·38	Vara, . . 43·20 = 5 Palmos.	Foot, . 12·944 in. League, 3·84 mi.
Prussia, .	Marc, 3609	Pound, . . 1·031 Quintal, . 113·42 = 110 lbs.	Ell, . . . 26·25	Foot, 12·356 in. Mile, 4·68 mi.
Prusso-German Commercial League or Zollverein.	....	Centner, . . 110·25 = 100 lbs.	....	....
Rhineland,	....	....	....	Foot, . 12·356 in.
Roman States,	Libbra, 5234	Pound, . . ·7477	Canna, . 78·35 Braccio, . 25·33 (Ancona).	Foot, . 11·72 in. Mile, . ·92 mi.
Russia, . .	Pound, 6318	Pound, . . ·9026 Pood, . . . 36·00 = 40 lbs.	Arshine, 28·	Foot, . 13·75 in. Verst, . ·664 mi.
Sardinia, .	Libbra, 3795	Pound, . . . ·81	Rase, . 23·60	Mile, . 1·53 mi.
——Genoa, .	Libbra, 4891	Pound Sottile, ·69 Pound Grosso, ·77	Braccio, 22·69 = 2½ Palmi.	Palmo, 9·73 in.
Saxony, . .	Marc, 3608	Pound, . . 1·0294 Centner, . 113·234 = 110 lbs.	Ell, . . 22·30	Foot, . 11·15 in. Mile, . 5·63 mi.
Sicily, . .	....	Cantaro grosso, 192·5 = 100 Rottoli.	Canna, . 76·47 = 8 Palmi.	Palmo, 9·5 in. Mile, . 1·14 mi.
Singapore, .	Buncal, 832	Pecul = 100 Catties or 1600 Taels, 133·33	Covid, . 18·	....
	British weights	and measures are used	generally in the sale	of European Goods.
Spain, . . .	Marc, 3550	Pound, . . 1·0144 Arroba = 25 lbs. 25·36	Vara, . 33·384	Foot, . 11·128 in. League, 4·21 mi.
Sweden, . .	Marc, 3252	Pound, . . ·9376 Centner, . 112·512 = 120 lbs.	Ell, . . 23·36	Foot, . 11·684 in. Mile, . 6·64 mi.
Switzerland, .	....	Pound, . . 1·10	Ell, . . 23·62	Foot, . 11·81 in. Mile, . 5·20 mi.
——Geneva .	Mark, 3785	Pound, . . 1·21	Ell, . . 45·	Foot, . 19·21 in.
Turkey, . .	Chequee, 4957	Oke, . . . 2·832	Long Pik, 27·90	Berri, . 1·03 mi.
Tuscany, . .	Libbra, 5240	Pound, . . ·7486 Quintal=100lbs. 74·86	Braccio, 23·98	Foot, . 21·58 in. Mile, . 1·02 mi.
United States .	Same as in	Britain.	....	....
	The cwt. is	frequently reckoned as	100 lbs. under the	name of Quintal.
West Indies, (British),	Generally the same as in	Britain.	....	....
Wurtemberg, .	....	Pound, . . 1·03	Ell, . . 24·18	Foot, . 11·25 in.

Countries.	Land Measure.	Grain Measure.	Liquid Measure.
	Imper. acres.	Imper. bushels.	Imper. gallons.
INDIA, . .	Biggah, Bengal, ·33 = 20 Cottahs. Cawney, Madras, 1·32	Candy, Bombay, . . 24·25 = 20 Maunds. Grain is usually sold by weight.	Liquids are usually sold by weight, except at Calcutta, Madras, and Bombay, where the imperial measures are used for wines and spirits.
LUBEC, . .	....	Scheffel, ... ·92	Ahm = 20 Viertels, 31·85
MALTA, . .	Salma, . 4·44	Salma, ... 7·87	Barile, ... 9·33
MEXICO, . .	Same as in Spain.	....	....
NAPLES, .	Moggia, . ·83	Tomolo, ... 1·51 Carro = 36 Tomoli, . 54·36	Barile, . . . 9·60 Carro, = 24 Barili, 230·40
New Brunswick,	Same as in Britain.	....	....
Newfoundland,	Same as in Britain.	....	....
NORWAY, .	Same as Denmark.	....	....
NOVA SCOTIA,	Same as in Britain.	....	....
PERSIA, . .	....	Artaba, ... 1·93	....
PERU, . .	Same as in Spain.	....	....
POLAND, . .	Morgen, . 1·38	Korsec, ... 3·52	Garniecs, . . ·88
PORTUGAL, .	Geira, . . 1·43	Moyo = 15 Fanegas, . 22·39	Almude, . . . 3·64
PRUSSIA, . .	Morgen, . ·63	Scheffel = 16 Metzen, 1·516	Eimer, . . . 15·11 Ohm, ... 30·22
Prusso-German Commercial League or Zollverein, .	....	....	....
RHINELAND,	....	....	....
Roman States,	....	Rubbio, = 22 Scorzi, . 8·101	Barile=32 Boccali, 12·84
RUSSIA, . .	Deciatina, . 2·70	Chetwerk, ... 5·7698	Vedro, ... 2·7048 Oxhoft = 18 Vedros 48·68
SARDINIA, .	Giornate, . ·93 = 100 Tavoli.	....	Brenta = 6 Rubbi, 12·41
——GENOA, .	Giornate, . ·93	Mina, Genoa, . . . 3·32	Mezzarola, . . 32·57
SAXONY, . .	Morgen, . 1·36	Wispel, Dresden, . . 69·85 = 24 Scheffels. Scheffel, ... 2·91	Eimer, Dresden, 14·89
SICILY, . .	Moggia, . ·83	Salma generale, . . 7·61 = 16 Tomoli.	Tonna=4 Barili, 31·24
SINGAPORE, .	.... British Weights and	.... Measures are generally used in	Gantang, . . . 1·04 the sale of European goods.
SPAIN, . .	Fanegada, 1·06	Fanega, ... 1·55 Cahiz = 12 Fanegas, 18·60	Arroba (wine), . 3·538 Moyo=16 Arrobas, 56·61
SWEDEN, . .	Tunneland, 1·13	Tunna, dry = 36 Kappar, 4·028	Kann, . . . ·5756
Switzerland, .	Faux, . 1·62	100 Viertel, ... 41·26	100 Maas, . . 33·01
——Geneva,	Arpent, . 1·27	Coupe, ... 2·13	Fuder=12 Setiers, 120·71
TURKEY, . .	....	Fortin = 4 Killows, . 3·84	100 Almudes, . 115·
TUSCANY, .	Saccata, . 1·22	Stajo, ... ·67	Barile, . . . 10·033
United States,	Same as in Britain.	Same as the former English	Measures.
WEST INDIES, (British),	Generally the same as in Britain.	....	....
Wurtemburg,	Morgen, . 2·40	Scheffel, ... 4·88	Fuder = 6 Eimers, 388·16

CURRENT COINS OF THE PRINCIPAL COMMERCIAL COUNTRIES,

National Denomination.	Weight.		English Value.		
AMERICA (UNITED STATES).	Gold.				
	dwt.	grs.	l.	s.	d.
Eagle of 10 Dollars, ..	11	6	2	1	8
Half Eagle of 5 do., ..	5	15	1	0	10
Quarter Eagle of 2½ do.,	2	19½	0	10	5
	Silver.				
Dollar, or 100 Cents, ..	17	10	0	4	2
Half Dollar, or 50 do.,	8	17	0	2	1
Quarter Dollar, or 25 do.,	4	8½	0	1	0½
AUSTRIA AND BOHEMIA.	Gold.				
	dwt.	grs.	l.	s.	d.
Ducat, (Emperor's) ..	2	5¾	0	9	5
Ducat, (Hungarian) ..	2	5¾	0	9	6
Souverain, ...	3	14	0	13	11
Half Ditto, ...	1	19	0	6	11½
	Silver.				
Crown, ...	18	1	0	4	1½
Florin, or 60 Kreutzers,	9	0½	0	2	1
20 Kreutzers, ...	4	6½	0	0	8¼
10 Ditto, ...	2	11	0	0	4
BAVARIA.	Gold.				
	dwt.	grs.	l.	s.	d.
Carolin, ...	6	5¼	1	0	4¼
Maximilian, ...	4	4	0	13	7½
	Silver.				
Crown, ...	18	2	0	4	6
Rix Dollar, ...	17	12	0	4	0¼
Siesten or Kopfstuck, .	4	6½	0	0	8¼
DENMARK.	Gold.				
	dwt.	grs.	l.	s.	d.
Christian d'or, ...	4	7	0	16	6¼
Ducat, ...	2	0	0	7	5¾
	Silver.				
Species Dol. or 12 Marks,	18	14	0	4	6¼
Rix Dollar, or 6 Marks,	17	6	0	4	0
Mark of 16 Skillings, ..	4	0	0	0	7½
EAST INDIES.	Gold.				
	dwt.	grs.	l.	s.	d.
Mohur of Bengal, ...	7	22¼	1	13	1
Mohur, Sicca of Do., ..	7	23	1	10	1
Rupee, Bombay, ...	7	11	1	9	1¾
Ditto, Madras, ...	7	12	1	9	2½
Star Pagoda, Madras, .	2	4¾	0	7	4¾
	Silver.				
Rupee, Sicca, ...	7	12	0	2	2½
Ditto, Arcott, ...	7	9	0	1	11¾
Ditto, Bombay, ...	7	11	0	1	11
Ditto, Broach, ...	7	10	0	1	9
FRANCE.	Gold.				
	dwt.	grs.	l.	s.	d.
40 Franc Piece, ...	8	7	1	11	8¼
20 Ditto, (Napoleon,) .	4	3½	0	15	10½
	Silver.				
5 Ditto, ...	16	0	0	3	11¼
2 Ditto, ...	6	11	0	1	7¼
1 Ditto, ...	3	5½	0	0	9¾
½, or 50 Centimes, ..	1	15¾	0	0	4¾
¼, or 25 Ditto, ...	0	18½	0	0	2⅜

National Denomination.	Weight.		English Value.		
GREAT BRITAIN.	Gold.				
	dwt.	grs.	l.	s.	d.
Double Sovereign, ...	10	6½	2	0	0
Sovereign, ...	5	3¼	1	0	0
Half Sovereign, ...	2	13⅝	0	10	0
	Silver.				
Crown, ...	18	4⅜	0	5	0
Half-Crown, ...	9	2	0	2	6
Florin, ...	7	6½	0	2	0
Shilling, ...	3	15¼	0	1	0
Sixpence, ...	1	19⅝	0	0	6
Fourpence, ...	1	5	0	0	4
Threepence, ...	—		0	0	3

NOTE.—The standard for gold coin in Great Britain is eleven parts fine gold and one of alloy, 1 lb. troy of which is coined into 46 sovereigns, and $\frac{89}{120}$ of another.

The standard for silver coin is a mixture of thirty-seven parts of fine silver and three of alloy, 1 lb. troy of which is coined into 66 shillings.

National Denomination.	Weight.		English Value.		
GENOA.	Gold.				
	dwt.	grs.	l.	s.	d.
Doppia, or Pistole, ..	4	7½	0	16	6¼
Sequin, ...	2	5¾	0	9	5½
New Genovina of 96 lire,	16	4	3	3	3½
New Genovina of 48 lire,	8	2	1	11	8
	Silver.				
Scudo della croce, ...	24	16¾	0	6	7
Scudo of 5 lire, ...	13	8½	0	3	5
Double Madonnina, ..	5	9¼	0	1	4¼
HAMBURG.	Gold.				
	dwt.	grs.	l.	s.	d.
Ducat of 6½ Marks	2	5¾	0	9	4½
	Silver.				
Rix Dollar, or 3 Marks,	18	18	0	4	7½
Mark, or 16 Schillings,	5	20	0	1	2¼
HANOVER.	Gold.				
	dwt.	grs.	l.	s.	d.
George d'or, ...	4	6½	0	16	4½
Ducat, ...	2	5¾	0	9	5¼
Double gold Florin, ..	4	4	0	13	9¾
Gold Florin, ...	2	2	0	6	10¾
	Silver.				
Rix Dollar, ...	18	19	0	4	8
Florin, (fine), ...	8	10	0	2	4
Half Ditto, ...	4	4	0	1	2
Quarter Ditto, ...	2	1	0	0	6¾
Florin, (base), ...	11	0¾	0	2	4
HOLLAND.	Gold.				
	dwt.	grs.	l.	s.	d.
20 Florin Piece, ...	9	7¾	1	14	2¼
Ryder, ...	6	9	1	4	9¾
10 Florin Piece, ...	4	15½	0	17	1⅜
10 Williams, 1818, ...	4	7¾	0	16	6
	Silver.				
Ducatoon, ...	20	22	0	5	6
Ducat, or Rix Dollar, .	18	6	0	4	5
Florin, (20 Sous), ...	6	18	0	1	8½
Escalin, (6 Sous), ...	3	4½	0	0	6
NAPLES.	Gold.				
	dwt.	grs.	l.	s.	d.
Ounce of 3 Ducats, ..	2	10¼	0	10	3½

National Denomination.	Weight.	English Value.
NAPLES.	Silver.	
	dwt. grs.	l. s. d.
12 Carlini, 1804, ...	17 15	0 4 1¾
Ducat of 10 Carlini, 1818,	14 18	0 3 5¼
2 Carlini, 1804, ...	2 22	0 0 8
1 Ditto, ,, ...	1 11	0 0 4
POLAND AND PRUSSIA.	Gold.	
	dwt. grs.	l. s. d.
Frederic d'or, ...	4 7	0 16 3½
Half Ditto, ...	2 3½	0 8 2¾
Ducat, ...	2 5¾	0 9 4¼
	Silver.	
Rix Dollar, ...	14 6½	0 2 11¼
5 Groschen, ...	2 9	0 0 5¾
Groschen, ...	—	0 0 1⅛
PORTUGAL.	Gold.	
	dwt. grs.	l. s. d.
Moidore of 4800 Reis, .	6 22	1 6 11¼
Half Ditto, ...	3 11	0 13 5⅝
Quarter Ditto, ...	1 17½	0 6 8¾
Moiadobra, ...	9 5⅛	1 15 11
Half Ditto, ...	4 14⅜	0 17 10½
16 Testons, ...	2 6	0 8 7¾
12 Ditto, ...	1 16½	0 6 6
8 Ditto, ...	1 3	0 4 4
Cruzada, ...	0 16¼	0 2 7½
	Silver.	
New Cruzada of 480 Reis,	9 3	0 2 4¾
ROME.	Gold.	
	dwt. grs.	l. s. d.
Pistola of Pius VI. and VII., ...	3 12¾	0 13 11¼
Half Ditto, ...	1 18	0 6 11½
Zecchino, 1769, ...	2 4½	0 9 4½
Half Ditto, ...	1 2¼	0 4 8¼
	Silver.	
Crown of 10 Paoli, ...	17 1	0 4 3¾
Testone of 3 Ditto, ...	5 2	0 1 3½
Testone of 2 Ditto, ...	3 10	0 0 10½
Paolo, ...	1 17	0 0 5¼
RUSSIA.	Gold.	
	dwt. grs.	l. s. d.
Ducat of 1763, ...	2 5¾	0 9 3¾
Imperial of 10 Rubles,	7 17¼	1 12 2¼
Half Ditto, ...	3 20½	0 16 1
	Silver.	
Ruble of 100 Copecks, .	15 10	0 3 2¾
SARDINIA.	Gold.	
	dwt. grs.	l. s. d.
Carlino, 1768, ...	10 7½	1 13 11½
Half Ditto, ...	5 2⅜	0 19 6¾
Pistola, ...	5 10½	1 2 6¾
Half Ditto, ...	2 17⅛	0 11 3¼
SAXONY.	Gold.	
	dwt. grs.	l. s. d.
Double Augustus, ...	8 13 11/12	1 12 11
Augustus or 5 Thalers,	4 6 10/12	0 16 5½
Half Ditto, ...	2 3 5/12	0 8 2¾
SAXONY.	Silver.	
	dwt. grs.	l. s. d.
Rix Dollar, ...	18 1	0 4 2
Half Ditto, ...	9 0½	0 2 1
SICILY.	Gold.	
	dwt. grs.	l. s. d.
Ounce, 1748, ...	2 20½	0 10 3½
	Silver.	
Crown of 12 Tarins, ..	17 14	0 4 0½
SPAIN.	Gold.	
	dwt. grs.	l. s. d.
Doubloon of 8 Crowns,	17 9	3 4 8
Ditto 4 ,,	8 16½	1 12 4
Ditto 2 ,,	4 8¼	0 16 2
Half Pistole, or Crown,	2 4⅛	0 8 1
	Silver.	
Piastre, ...	17 8½	0 4 3¾
Peceta, ...	3 18	0 0 10
Half Ditto, ...	1 21	0 0 5
Reallillo, ...	0 22½	0 0 2½
SWEDEN.	Gold.	
	dwt. grs.	l. s. d.
Ducat, ...	2 5	0 9 2¼
Half Ditto, ...	1 2½	0 4 7⅛
Quarter Ditto, ...	0 13¼	0 2 3½
	Silver.	
Rix Dollar, ...	18 17	0 4 6¼
Two-thirds Ditto, ...	12 11⅓	0 3 0
One-third Ditto., ...	6 5⅝	0 1 6
SWITZERLAND.	Gold.	
	dwt. grs.	l. s. d.
32 Franken Piece, ...	8 22	1 17 9
16 Ditto, ...	4 11	0 18 10½
Ducat of Zurich, ...	2 5¾	0 9 5
Ditto of Berne, ...	2 5½	0 9 2¾
Pistole of Ditto, ...	4 21½	0 18 9
	Silver.	
Crown of Basle, ...	15 1	0 3 7¼
Half Ditto, or Florin, .	7 12½	0 1 9¼
Franken of Berne, ...	4 17¼	0 1 2¼
4 Franken of Berne, ..	18 22	0 4 8
Crown of Zurich, ...	16 0	0 3 8½
Half Ditto, ...	8 0	0 1 10¼
4 Franken of Switzerland, (Ecu), ...	18 23	0 4 9¼
2 Ditto, ...	9 11½	0 2 4½
1 Ditto, (10 Batzen), ..	4 17¾	0 1 2¼
TURKEY.	Gold.	
	dwt. grs.	l. s. d.
Zecchin of Sel. III.....	1 19	0 7 6
Zecchin Zermahboub,	1 16	0 5 9½
Half Ditto, ...	0 20	0 2 10¾
Quarter Ditto, ...	0 10	0 1 5¼
Roubbie, ...	0 13⅜	0 1 11
	Silver.	
Altmichlec of 60 Paras,	15 50	0 2 9½
Yaremlec of 20 Paras,	—	0 0 9¼
Rouble of 10 Paras, ..	—	0 0 4½
Aspre, 120 in Piastre, .	—	0 0 0⅜
Piastre of 40 Paras, ..	—	0 1 7
Piece of 5 Piastres, ..	—	0 2 3¼

SHORT INTO LONG WEIGHT.

112 lb.
SHORT WEIGHT
INTO
LONG WEIGHT
120 lb.

Cwt. of

112.		120.		
C.	qr.	C.	qr.	lb.
~	1	0	0	28
~	2	0	1	26
~	3	0	2	24
1	~	0	3	22
1	1	1	0	20
1	2	1	1	18
1	3	1	2	16
2	~	1	3	14
2	1	2	0	12
2	2	2	1	10
2	3	2	2	8
3	~	2	3	6
3	1	3	0	4
3	2	3	1	2
3	3	3	2	0
4	~	3	2	28
4	1	3	3	26
4	2	4	0	24
4	3	4	1	22
5	~	4	2	20
5	1	4	3	18
5	2	5	0	16
5	3	5	1	14
6	~	5	2	12
6	1	5	3	10
6	2	6	0	8
6	3	6	1	6
7	~	6	2	4
7	1	6	3	2
7	2	7	0	0
7	3	7	0	28
8	~	7	1	26
8	1	7	2	24
8	2	7	3	22
8	3	8	0	20
9	~	8	1	18
9	1	8	2	16
9	2	8	3	14
9	3	9	0	12
10	~	9	1	10
10	1	9	2	8
10	2	9	3	6
10	3	10	0	4
11	~	10	1	2
11	1	10	2	0
11	2	10	2	28
11	3	10	3	26
12	~	11	0	24
12	1	11	1	22
12	2	11	2	20
12	3	11	3	18

112 lb.
SHORT WEIGHT
INTO
LONG WEIGHT,
120 lb.

112.		120.		
C.	qr.	C.	qr.	lb.
13	~	12	0	16
13	1	12	1	14
13	2	12	2	12
13	3	12	3	10
14	~	13	0	8
14	1	13	1	6
14	2	13	2	4
14	3	13	3	2
15	~	14	0	0
15	1	14	0	28
15	2	14	1	26
15	3	14	2	24
16	~	14		22
16	1	15	0	20
16	2	15	1	18
16	3	15	2	16
17	~	15	3	14
17	1	16	0	12
17	2	16	1	10
17	3	16	2	8
18	~	16	3	6
18	1	17	0	4
18	2	17	1	2
18	3	17	2	0
19	~	17	2	28
19	1	17	3	26
19	2	18	0	24
19	3	18	1	22
20	~	18	2	20

TONS.

T.	T.	C.	qr.	lb.
1	0	18	2	20
2	1	17	1	10
3	2	16	0	0
4	3	14	2	20
5	4	13	1	10
6	5	12	0	0
7	6	10	2	20
8	7	9	1	10
9	8	8	0	0
10	9	6	2	20
11	10	5	1	10
12	11	4	0	0
13	12	2	2	20
14	13	1	1	10
15	14	0	0	0
16	14	18	2	20
17	15	17	1	10
18	16	16	0	0
19	17	14	2	20
20	18	13	1	10

112 lb.
SHORT WEIGHT
INTO
LONG WEIGHT,
120 lb.

112.	120.			
T.	T.	C.	qr.	lb.
21	19	12	0	0
22	20	10	2	20
23	21	9	1	10
24	22	8	0	0
25	23	6	2	20
26	24	5	1	10
27	25	4	0	0
28	26	2	2	20
29	27	1	1	10
30	28	0	0	0
31	28	18	2	20
32	29	17	1	10
33	30	16	0	0
34	31	14	2	20
35	32	13	1	10
36	33	12	0	0
37	34	10	2	20
38	35	9	1	10
39	36	8	0	0
40	37	6	2	20
41	38	5	1	10
42	39	4	0	0
43	40	2	2	20
44	41	1	1	10
45	42	0	0	0
46	42	18	2	20
47	43	17	1	10
48	44	16	0	0
49	45	14	2	20
50	46	13	1	10
51	47	12	0	0
52	48	10	2	20
53	49	9	1	10
54	50	8	0	0
55	51	6	2	20
56	52	5	1	10
57	53	4	0	0
58	54	2	2	20
59	55	1	1	10
60	56	0	0	0
61	56	18	2	20
62	57	17	1	10
63	58	16	0	0
64	59	14	2	20
65	60	13	1	10
66	61	12	0	0
67	62	10	2	20
68	63	9	1	10
69	64	8	0	0
70	65	6	2	20
71	66	5	1	10
72	67	4	0	0

112 lb.
SHORT WEIGHT
INTO
LONG WEIGHT.
120 lb.

112.	120.			
T.	T.	C.	qr.	lb.
73	68	2	2	20
74	69	1	1	10
75	70	0	0	0
76	70	18	2	20
77	71	17	1	10
78	72	16	0	0
79	73	14	2	20
80	74	13	1	10
81	75	12	0	0
82	76	10	2	20
83	77	9	1	10
84	78	8	0	0
85	79	6	2	20
86	80	5	1	10
87	81	4	0	0
88	82	2	2	20
89	83	1	1	10
90	84	0	0	0
91	84	18	2	20
92	85	17	1	10
93	86	16	0	0
94	87	14	2	20
95	88	13	1	10
96	89	12	0	0
97	90	10	2	20
98	91	9	1	10
99	92	8	0	0
100	93	6	2	20
105	98	0	0	0
110	102	13	1	10
115	107	6	2	20
120	112	0	0	0
125	116	13	1	10
130	121	6	2	20
135	126	0	0	0
140	130	13	1	10
150	140	0	0	0
160	149	6	2	20
170	158	13	1	10
180	168	0	0	0
190	177	6	2	20
200	186	13	1	10
210	196	0	0	0
220	205	6	2	20
230	214	13	1	10
240	224	0	0	0
250	233	6	2	20
260	242	13	1	10
270	252	0	0	0
280	261	6	2	20
290	270	13	1	10
300	280	0	0	0

LONG INTO SHORT WEIGHT.

120 lb.
LONG WEIGHT
INTO
SHORT WEIGHT
112 lb.

Cwt. of

120. C.	qr.	112. C.	qr.	lb.
~	1	0	1	2
~	2	0	2	4
~	3	0	3	6
1	~	1	0	8
1	1	1	1	10
1	2	1	2	12
1	3	1	3	14
2	~	2	0	16
2	1	2	1	18
2	2	2	2	20
2	3	2	3	22
3	~	3	0	24
3	1	3	1	26
3	2	3	3	0
3	3	4	0	2
4	~	4	1	4
4	1	4	2	6
4	2	4	3	8
4	3	5	0	10
5	~	5	1	12
5	1	5	2	14
5	2	5	3	16
5	3	6	0	18
6	~	6	1	20
6	1	6	2	22
6	2	6	3	24
6	3	7	0	26
7	~	7	2	0
7	1	7	3	2
7	2	8	0	4
7	3	8	1	6
8	~	8	2	8
8	1	8	3	10
8	2	9	0	12
8	3	9	1	14
9	~	9	2	16
9	1	9	3	18
9	2	10	0	20
9	3	10	1	22
10	~	10	2	24
10	1	10	3	26
10	2	11	1	0
10	3	11	2	2
11	~	11	3	4
11	1	12	0	6
11	2	12	1	8
11	3	12	2	10
12	~	12	3	12
12	1	13	0	14
12	2	13	1	16
12	3	13	2	18

120 lb.
LONG WEIGHT
INTO
SHORT WEIGHT
112 lb.

120. C.	qr.	112. C.	qr.	lb.
13	~	13	3	20
13	1	14	0	22
13	2	14	1	24
13	3	14	2	26
14	~	15	0	0
14	1	15	1	2
14	2	15	2	4
14	3	15	3	6
15	~	16	0	8
15	1	16	1	10
15	2	16	2	12
15	3	16	3	14
16	~	17	0	16
16	1	17	1	18
16	2	17	2	20
16	3	17	3	22
17	~	18	0	24
17	1	18	1	26
17	2	18	3	0
17	3	19	0	2
18	~	19	1	4
18	1	19	2	6
18	2	19	3	8
18	3	20	0	10
19	~	20	1	12
19	1	20	2	14
19	2	20	3	16
19	3	21	0	18
20	~	21	1	20

TONS.

T.	T.	C.	qr.	lb.
1	1	1	1	20
2	2	2	3	12
3	3	4	1	4
4	4	5	2	24
5	5	7	0	16
6	6	8	2	0
7	7	10	0	0
8	8	11	1	20
9	9	12	3	12
10	10	14	1	4
11	11	15	2	24
12	12	17	0	16
13	13	18	2	8
14	15	0	0	0
15	16	1	1	20
16	17	2	3	12
17	18	4	1	4
18	19	5	2	24
19	20	7	0	16
20	21	8	2	8

120 lb.
LONG WEIGHT
INTO
SHORT WEIGHT
112 lb.

120. T.	112 lb. T.	C.	qr.	lb.
21	22	10	0	0
22	23	11	1	20
23	24	12	3	12
24	25	14	1	4
25	26	15	2	24
26	27	17	0	16
27	28	18	2	8
28	30	0	0	0
29	31	1	1	20
30	32	2	3	12
31	33	4	1	4
32	34	5	2	24
33	35	7	0	16
34	36	8	2	8
35	37	10	0	0
36	38	11	1	20
37	39	12	3	12
38	40	14	1	4
39	41	15	2	24
40	42	17	0	16
41	43	18	2	8
42	45	0	0	0
43	46	1	1	20
44	47	2	3	12
45	48	4	1	4
46	49	5	2	24
47	50	7	0	16
48	51	8	2	8
49	52	10	0	0
50	53	11	1	20
51	54	12	3	12
52	55	14	1	4
53	56	15	2	24
54	57	17	0	16
55	58	18	2	8
56	60	0	0	0
57	61	1	1	20
58	62	2	3	12
59	63	4	1	4
60	64	5	2	24
61	65	7	0	16
62	66	8	2	8
63	67	10	0	0
64	68	11	1	20
65	69	12	3	12
66	70	14	1	4
67	71	15	2	24
68	72	17	0	16
69	73	18	2	8
70	75	0	0	0
71	76	1	1	20
72	77	2	3	12

120 lb.
LONG WEIGHT
INTO
SHORT WEIGHT
112 lb.

120. T.	112. T.	C.	qr.	lb.
73	78	4	1	4
74	79	5	2	24
75	80	7	0	16
76	81	8	2	8
77	82	10	0	0
78	83	11	1	20
79	84	12	3	12
80	85	14	1	4
81	86	15	2	24
82	87	17	0	16
83	88	18	2	8
84	90	0	0	0
85	91	1	1	20
86	92	2	3	12
87	93	4	1	4
88	94	5	2	24
89	95	7	0	16
90	96	8	2	8
91	97	10	0	0
92	98	11	1	20
93	99	12	3	12
94	100	14	1	4
95	101	15	2	24
96	102	17	0	16
97	103	18	2	8
98	105	0	0	0
99	106	1	1	20
100	107	2	3	12
105	112	10	0	0
110	117	17	0	16
115	123	4	1	4
120	128	11	1	20
125	133	18	2	8
130	139	5	2	24
135	144	12	3	12
140	150	0	0	0
150	160	14	1	4
160	171	8	2	8
170	182	2	3	12
180	192	17	0	16
190	203	11	1	20
200	214	5	2	24
210	225	0	0	0
220	235	14	1	4
230	246	8	2	8
240	257	2	3	12
250	267	17	0	16
260	278	11	1	20
270	289	5	2	24
280	300	0	0	0
290	310	14	1	4
300	321	8	2	8

THE FOLLOWING TABLES

CONSTITUTE AN

IMPROVED WAGES CALCULATOR,

SHOWING, AT ONE VIEW,

ANY AMOUNT OF WAGES REQUIRED FOR ½ AN HOUR TO 15 DAYS,

OF TEN HOURS PER DAY,

At Rates varying from 2s. to 50s. per Week.

Explanation:—Look in the Column under the Rate per Week, and in a line with the number of Days will be found the amount required. If there should be portions of a day, or hours, the sums which such will amount to will be found by similar reference to the Columns under the several Rates per Week expressed at the head and foot thereof.

To give an example of its workings,—Suppose a person to have 28*s*. per Week as wages, and he has made 5 days 6 hours;—What amount will be due to him?

	s.	*d.*
In a line with 5 days, under 28*s*. per Week, is .	23	4
And in a line with 6 hours, under ditto, is	2	9½
Total, ...	26	1½

FROM 2s. TO 4s. 6d. PER WEEK.

Rates per Week.		*2s.*		*2s. 6d.*		*3s.*		*3s. 6d.*		*4s.*		*4s. 6d.*	
DAYS.	HRS.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
...	½	–	–¼	–	–¼	–	–¼	–	–¼	–	–½	–	–½
...	1	–	–½	–	–½	–	–½	–	–¾	–	–¾	–	1
...	1½	–	–½	–	–¾	–	1	–	1	–	1¼	–	1¼
...	2	–	–¾	–	1	–	1¼	–	1½	–	1½	–	1¾
¼	2½	–	1	–	1¼	–	1½	–	1¾	–	2	–	2¼
...	3	–	1¼	–	1½	–	1¾	–	2	–	2½	–	2¾
...	3½	–	1½	–	1¾	–	2	–	2½	–	2¾	–	3¼
...	4	–	1½	–	2	–	2½	–	2¾	–	3¼	–	3½
...	4½	–	1¾	–	2¼	–	2¾	–	3¼	–	3½	–	4
½	5	–	2	–	2½	–	3	–	3½	–	4	–	4½
...	5½	–	2¼	–	2¾	–	3¼	–	3¾	–	4½	–	5
...	6	–	2½	–	3	–	3½	–	4¼	–	4¾	–	5½
...	6½	–	2½	–	3¼	–	4	–	4½	–	5¼	–	5¾
...	7	–	2¾	–	3½	–	4¼	–	5	–	5½	–	6¼
¾	7½	–	3	–	3¾	–	4½	–	5¼	–	6	–	6¾
...	8	–	3¼	–	4	–	4¾	–	5½	–	6½	–	7¼
...	8½	–	3½	–	4¼	–	5	–	6	–	6¾	–	7¾
...	9	–	3½	–	4½	–	5½	–	6¼	–	7¼	–	8
...	9½	–	3¾	–	4¾	–	5¾	–	6¾	–	7½	–	8½
1	...	–	4	–	5	–	6	–	7	–	8	–	9
2	...	–	8	–	10	1	–	1	2	1	4	1	6
3	...	1	–	1	3	1	6	1	9	2	–	2	3
4	...	1	4	1	8	2	–	2	4	2	8	3	–
5	...	1	8	2	1	2	6	2	11	3	4	3	9
6	...	2	–	2	6	3	–	3	6	4	–	4	6
7	...	2	4	2	11	3	6	4	1	4	8	5	3
8	...	2	8	3	4	4	–	4	8	5	4	6	–
9	...	3	–	3	9	4	6	5	3	6	–	6	9
10	...	3	4	4	2	5	–	5	10	6	8	7	6
11	...	3	8	4	7	5	6	6	5	7	4	8	3
12	...	4	–	5	–	6	–	7	–	8	–	9	–
13	...	4	4	5	5	6	6	7	7	8	8	9	9
14	...	4	8	5	10	7	–	8	2	9	4	10	6
15	...	5	–	6	3	7	6	8	9	10	–	11	3
Rates per Week		*2s.*		*2s. 6d.*		*3s.*		*3s. 6d.*		*4s.*		*4s. 6d.*	
Rates per Day of 10 hrs.		*4d.*		*5d.*		*6d.*		*7d.*		*8d.*		*9d.*	

FROM 5s. TO 7s. 6d. PER WEEK.

Rates per Week.		*5s.*		*5s. 6d.*		*6s.*		*6s. 6d.*		*7s.*		*7s. 6d.*	
DAYS.	HRS.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
...	½	–	–½	–	–½	–	–½	–	–¾	–	–¾	–	–¾
...	1	–	1	–	1	–	1¼	–	1¼	–	1½	–	1½
...	1½	–	1½	–	1¾	–	1¾	–	2	–	2	–	2¼
...	2	–	2	–	2¼	–	2½	–	2½	–	2¾	–	3
¼	2½	–	2½	–	2¾	–	3	–	3¼	–	3½	–	3¾
...	3	–	3	–	3¼	–	3½	–	3¾	–	4¼	–	4½
...	3½	–	3½	–	3¾	–	4¼	–	4½	–	5	–	5¼
...	4	–	4	–	4½	–	4¾	–	5¼	–	5½	–	6
...	4½	–	4½	–	5	–	5½	–	5¾	–	6¼	–	6¾
½	5	–	5	–	5½	–	6	–	6½	–	7	–	7½
...	5½	–	5½	–	6	–	6½	–	7¼	–	7¾	–	8¼
...	6	–	6	–	6½	–	7¼	–	7¾	–	8½	–	9
...	6½	–	6½	–	7¼	–	7¾	–	8½	–	9	–	9¾
...	7	–	7	–	7¾	–	8½	–	9	–	9¾	–	10½
¾	7½	–	7½	–	8¼	–	9	–	9¾	–	10½	–	11¼
...	8	–	8	–	8¾	–	9½	–	10½	–	11¼	1	–
...	8½	–	8½	–	9¼	–	10¼	–	11	1	–	1	–¾
...	9	–	9	–	10	–	10¾	–	11¾	1	–½	1	1½
...	9½	–	9½	–	10½	–	11½	1	–¼	1	1¼	1	2¼
1	...	–	10	–	11	1	–	1	1	1	2	1	3
2	...	1	8	1	10	2	–	2	2	2	4	2	6
3	...	2	6	2	9	3	–	3	3	3	6	3	9
4	...	3	4	3	8	4	–	4	4	4	8	5	–
5	...	4	2	4	7	5	–	5	5	5	10	6	3
6	...	5	–	5	6	6	–	6	6	7	–	7	6
7	...	5	10	6	5	7	–	7	7	8	2	8	9
8	...	6	8	7	4	8	–	8	8	9	4	10	–
9	...	7	6	8	3	9	–	9	9	10	6	11	3
10	...	8	4	9	2	10	–	10	10	11	8	12	6
11	...	9	2	10	1	11	–	11	11	12	10	13	9
12	...	10	–	11	–	12	–	13	–	14	–	15	–
13	...	10	10	11	11	13	–	14	1	15	2	16	3
14	...	11	8	12	10	14	–	15	2	16	4	17	6
15	...	12	6	13	9	15	–	16	3	17	6	18	9
Rates per Week.		*5s.*		*5s. 6d.*		*6s.*		*6s. 6d.*		*7s.*		*7s. 6d.*	
Rates per Day of 10 hrs.		10*d.*		11*d.*		1*s.*		1*s.* 1*d.*		1*s.* 2*d.*		1*s.* 3*d.*	

FROM 8s. TO 11s. PER WEEK.

Rates per Week.		8s.		8s. 6d.		9s.		9s. 6d.		10s.		11s.	
DAYS.	HRS.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
...	½	–	–¾	–	–¾	–	1	–	1	–	1	–	1
...	1	–	1½	–	1¾	–	1¾	–	2	–	2	–	2¼
...	1½	–	2½	–	2½	–	2¾	–	2¾	–	3	–	3¼
...	2	–	3¼	–	3½	–	3½	–	3¾	–	4	–	4¼
¼	2½	–	4	–	4¼	–	4½	–	4¾	–	5	–	5½
...	3	–	4¾	–	5	–	5½	–	5¾	–	6	–	6½
...	3½	–	5½	–	6	–	6¼	–	6¾	–	7	–	7¾
...	4	–	6½	–	6¾	–	7¼	–	7½	–	8	–	8¾
...	4½	–	7¼	–	7¾	–	8	–	8½	–	9	–	9¾
½	5	–	8	–	8½	–	9	–	9½	–	10	–	11
...	5½	–	8¾	–	9¼	–	9¾	–	10½	–	11	1	–
...	6	–	9½	–	10¼	–	10¾	–	11½	1	–	1	1¼
...	6½	–	10½	–	11	–	11¾	1	–¼	1	1	1	2¼
...	7	–	11¼	1	–	1	–½	1	1¼	1	2	1	3¼
¾	7½	1	–	1	–¾	1	1½	1	2¼	1	3	1	4½
...	8	1	–¾	1	1½	1	2½	1	3¼	1	4	1	5½
...	8½	1	1¾	1	2½	1	3¼	1	4¼	1	5	1	6¾
...	9	1	2½	1	3¼	1	4¼	1	5	1	6	1	7¾
...	9½	1	3¼	1	4¼	1	5	1	6	1	7	1	8¾
1	...	1	4	1	5	1	6	1	7	1	8	1	10
2	...	2	8	2	10	3	–	3	2	3	4	3	8
3	...	4	–	4	3	4	6	4	9	5	–	5	6
4	...	5	4	5	8	6	–	6	4	6	8	7	4
5	...	6	8	7	1	7	6	7	11	8	4	9	2
6	...	8	–	8	6	9	–	9	6	10	–	11	–
7	...	9	4	9	11	10	6	11	1	11	8	12	10
8	...	10	8	11	4	12	–	12	8	13	4	14	8
9	...	12	–	12	9	13	6	14	3	15	–	16	6
10	...	13	4	14	2	15	–	15	10	16	8	18	4
11	...	14	8	15	7	16	6	17	5	18	4	20	2
12	...	16	–	17	–	18	–	19	–	20	–	22	–
13	...	17	4	18	5	19	6	20	7	21	8	23	10
14	...	18	8	19	10	21	–	22	2	23	4	25	8
15	...	20	–	21	3	22	6	23	9	25	–	27	6
Rates per Week.		8s.		8s. 6d.		9s.		9s. 6d.		10s.		11s.	
Rates per Day of 10 hrs.		1s. 4d.		1s. 5d.		1s. 6d.		1s. 7d.		1s. 8d.		1s. 10d.	

FROM 12s. TO 17s. PER WEEK.

Rates per Week.		12*s*.		13*s*.		14*s*.		15*s*.		16*s*.		17*s*.	
DAYS.	HRS.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
...	½	–	1¼	–	1¼	–	1½	–	1½	–	1½	–	1¾
...	1	–	2½	–	2½	–	2¾	–	3	–	3¼	–	3½
...	1½	–	3½	–	4	–	4¼	–	4½	–	4¾	–	5
...	2	–	4¾	–	5¼	–	5½	–	6	–	6½	–	6¾
¼	2½	–	6	–	6½	–	7	–	7½	–	8	–	8½
...	3	–	7¼	–	7¾	–	8½	–	9	–	9½	–	10¼
...	3½	–	8½	–	9	–	9¾	–	10½	–	11½	1	–
...	4	–	9½	–	10½	–	11¼	1	–	1	–¾	1	1½
...	4½	–	10¾	–	11¾	1	–½	1	1½	1	2½	1	3¼
½	5	1	–	1	1	1	2	1	3	1	4	1	5
...	5½	1	1¼	1	2¼	1	3½	1	4½	1	5½	1	6¾
...	6	1	2½	1	3½	1	4¾	1	6	1	7¼	1	8½
...	6½	1	3½	1	5	1	6¼	1	7½	1	8¾	1	10
...	7	1	4¾	1	6¼	1	7½	1	9	1	10½	1	11¾
¾	7½	1	6	1	7½	1	9	1	10½	2	–	2	1½
...	8	1	7¼	1	8¾	1	10½	2	–	2	1½	2	3¼
...	8½	1	8½	1	10	1	11¾	2	1½	2	3¼	2	5
...	9	1	9½	1	11¼	2	1¼	2	3	2	4¾	2	6½
...	9½	1	10¾	2	–¾	2	2½	2	4½	2	6½	2	8¼
1	...	2	–	2	2	2	4	2	6	2	8	2	10
2	...	4	–	4	4	4	8	5	–	5	4	5	8
3	...	6	–	6	6	7	–	7	6	8	–	8	6
4	...	8	–	8	8	9	4	10	–	10	8	11	4
5	...	10	–	10	10	11	8	12	6	13	4	14	2
6	...	12	–	13	–	14	–	15	–	16	–	17	–
7	...	14	–	15	2	16	4	17	6	18	8	19	10
8	...	16	–	17	4	18	8	20	–	21	4	22	8
9	...	18	–	19	6	21	–	22	6	24	–	25	6
10	...	20	–	21	8	23	4	25	–	26	8	28	4
11	...	22	–	23	10	25	8	27	6	29	4	31	2
12	...	24	–	26	–	28	–	30	–	32	–	34	–
13	...	26	–	28	2	30	4	32	6	34	8	36	10
14	...	28	–	30	4	32	8	35	–	37	4	39	8
15	...	30	–	32	6	35	–	37	6	40	–	42	6
Rates per Week.		12*s*.		13*s*.		14*s*.		15*s*.		16*s*.		17*s*.	
Rates per Day of 10 hrs.		2*s*.		2*s*. 2*d*.		2*s*. 4*d*.		2*s*. 6*d*.		2*s*. 8*d*.		2*s*. 10*d*.	

FROM 18s. TO 23s. PER WEEK.

Rates per Week.		*18s.*		*19s.*		*20s.*		*21s.*		*22s.*		*23s.*	
DAYS.	HRS.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
...	½	–	1¾	–	1¾	–	2	–	2	–	2	–	2¼
...	1	–	3½	–	3¾	–	4	–	4	–	4½	–	4¾
...	1½	–	5¼	–	5½	–	6	–	6¼	–	6½	–	7
...	2	–	7¼	–	7½	–	8	–	8¼	–	8¾	–	9¼
¼	2½	–	9	–	9½	–	10	–	10½	–	11	–	11½
...	3	–	10¾	–	11¼	1	–	1	–½	1	1¼	1	1¾
...	3½	1	–½	1	1¼	1	2	1	2½	1	3½	1	4
...	4	1	2¼	1	3	1	4	1	4¾	1	5½	1	6¼
...	4½	1	4¼	1	5	1	6	1	7	1	7¾	1	8½
½	5	1	6	1	7	1	8	1	9	1	10	1	11
...	5½	1	7¾	1	8¾	1	10	1	11	2	–¼	2	1¼
...	6	1	9½	1	10¾	2	–	2	1	2	2½	2	3½
...	6½	1	11¼	2	–½	2	2	2	3¼	2	4½	2	5¾
...	7	2	1	2	2½	2	4	2	5½	2	6¾	2	8
¾	7½	2	3	2	4½	2	6	2	7½	2	9	2	10½
...	8	2	4¾	2	6¼	2	8	2	9¾	2	11¼	3	–¾
...	8½	2	6½	2	8¼	2	10	2	11¾	3	1½	3	3
...	9	2	8¼	2	10	3	–	3	1¾	3	3½	3	5¼
...	9½	2	10	3	–	3	2	3	4	3	5¾	3	7½
1	...	3	–	3	2	3	4	3	6	3	8	3	10
2	...	6	–	6	4	6	8	7	–	7	4	7	8
3	...	9	–	9	6	10	–	10	6	11	–	11	6
4	...	12	–	12	8	13	4	14	–	14	8	15	4
5	...	15	–	15	10	16	8	17	6	18	4	19	2
6	...	18	–	19	–	20	–	21	–	22	–	23	–
7	...	21	–	22	2	23	4	24	6	25	8	26	10
8	...	24	–	25	4	26	8	28	–	29	4	30	8
9	...	27	–	28	6	30	–	31	6	33	–	34	6
10	...	30	–	31	8	33	4	35	–	36	8	38	4
11	...	33	–	34	10	36	8	38	6	40	4	42	2
12	...	36	–	38	–	40	–	42	–	44	–	46	–
13	...	39	–	41	2	43	4	45	6	47	8	49	10
14	...	42	–	44	4	46	8	49	–	51	4	53	8
15	...	45	–	47	6	50	–	52	6	55	–	57	6
Rates per Week.		*18s.*		*19s.*		*20s.*		*21s.*		*22s.*		*23s.*	
Rates per Day of 10 hrs.		3*s.*		3*s.* 2*d.*		3*s.* 4*d.*		3*s.* 6*d.*		3*s.* 8*d.*		3*s.* 10*d.*	

FROM 24s. TO 29s. PER WEEK.

Rates per Week.		24*s*.		25*s*.		26*s*.		27*s*.		28*s*.		29*s*.	
DAYS.	HRS.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
...	½	–	2¼	–	2½	–	2½	–	2½	–	2¾	–	2¾
...	1	–	4¾	–	5	–	5	–	5¼	–	5½	–	5¾
...	1½	–	7¼	–	7½	–	7¾	–	8	–	8¼	–	8¾
...	2	–	9¾	–	10	–	10¼	–	10½	–	11	–	11¾
¼	2½	1	–	1	–½	1	1	1	1½	1	2	1	2½
...	3	1	2½	1	3	1	3½	1	4	1	4¾	1	5½
...	3½	1	5	1	5½	1	6	1	6¾	1	7½	1	8¼
...	4	1	7¼	1	8	1	8¾	1	9½	1	10¼	1	11¼
...	4½	1	9¾	1	10½	1	11¼	2	–¼	2	1	2	2¼
½	5	2	–	2	1	2	2	2	3	2	4	2	5
...	5½	2	2½	2	3½	2	4½	2	5½	2	6¾	2	7¾
...	6	2	5	2	6	2	7	2	8¼	2	9½	2	10¾
...	6½	2	7¼	2	8½	2	9¾	2	11	3	–¼	3	1¾
...	7	2	9¾	2	11	3	–¼	3	1¾	3	3¼	3	4½
¾	7½	3	–	3	1½	3	3	3	4½	3	6¼	3	7½
...	8	3	2½	3	4	3	5½	3	7¼	3	9	3	10¼
...	8½	3	5	3	6½	3	8	3	9¾	3	11¾	4	1¼
...	9	3	7¼	3	9	3	10¾	4	–½	4	2½	4	4
...	9½	3	9¾	3	11½	4	1¼	4	3¼	4	5¼	4	7
1	...	4	–	4	2	4	4	4	6	4	8	4	10
2	...	8	–	8	4	8	8	9	–	9	4	9	8
3	...	12	–	12	6	13	–	13	6	14	–	14	6
4	...	16	–	16	8	17	4	18	–	18	8	19	4
5	...	20	–	20	10	21	8	22	6	23	4	24	2
6	...	24	–	25	–	26	–	27	–	28	–	29	–
7	...	28	–	29	2	30	4	31	6	32	8	33	10
8	...	32	–	33	4	34	8	36	–	37	4	38	8
9	...	36	–	37	6	39	–	40	6	42	–	43	6
10	...	40	–	41	8	43	4	45	–	46	8	48	4
11	...	44	–	45	10	47	8	49	6	51	4	53	2
12	...	48	–	50	–	52	–	54	–	56	–	58	–
13	...	52	–	54	2	56	4	58	6	60	8	62	10
14	...	56	–	58	4	60	8	63	–	65	4	67	8
15	...	60	–	62	6	65	–	67	6	70	–	72	6
Rates per Week.		24*s*.		25*s*.		26*s*.		27*s*.		28*s*.		29*s*.	
Rates per Day of 10 hrs.		4*s*.		4*s*. 2*d*.		4*s*. 4*d*.		4*s*. 6*d*.		4*s*. 8*d*.		4*s*. 10*d*.	

FROM 30s. TO 35s. PER WEEK.

Rates per Week.		30s.		31s.		32s.		33s.		34s.		35s.	
DAYS.	HRS.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
...	½	–	3	–	3	–	3¼	–	3¼	–	3½	–	3½
...	1	–	6	–	6	–	6½	–	6½	–	6¾	–	7
...	1½	–	9	–	9¼	–	9½	–	10	–	10¼	–	10½
...	2	1	–	1	–½	1	–¾	1	1¼	1	1½	1	2
¼	2½	1	3	1	3½	1	4	1	4½	1	5	1	5½
...	3	1	6	1	6½	1	7¼	1	7¾	1	8¼	1	9
...	3½	1	9	1	9½	1	10½	1	11	1	11¾	2	–½
...	4	2	–	2	–¾	2	1½	2	2¼	2	3	2	4
...	4½	2	3	2	3¾	2	4¾	2	5½	2	6½	2	7½
½	5	2	6	2	7	2	8	2	9	2	10	2	11
...	5½	2	9	2	10	2	11¼	3	–¼	3	1¼	3	2½
...	6	3	–	3	1¼	3	2½	3	3¾	3	4¾	3	6
...	6½	3	3	3	4¼	3	5¾	3	6¾	3	8	3	9½
...	7	3	6	3	7¼	3	8¾	3	10	3	11½	4	1
¾	7½	3	9	3	10½	4	–	4	1½	4	3	4	4½
...	8	4	–	4	1½	4	3¼	4	4¾	4	6¼	4	8
...	8½	4	3	4	4½	4	6½	4	8	4	9¾	4	11½
...	9	4	6	4	7¾	4	9¾	4	11¼	5	1	5	3
...	9½	4	9	4	10¾	5	–¾	5	2½	5	4½	5	6½
1	...	5	–	5	2	5	4	5	6	5	8	5	10
2	...	10	–	10	4	10	8	11	–	11	4	11	8
3	...	15	–	15	6	16	–	16	6	17	–	17	6
4	...	20	–	20	8	21	4	22	–	22	8	23	4
5	...	25	–	25	10	26	8	27	6	28	4	29	2
6	...	30	–	31	–	32	–	33	–	34	–	35	–
7	...	35	–	36	2	37	4	38	6	39	8	40	10
8	...	40	–	41	4	42	8	44	–	45	4	46	8
9	...	45	–	46	6	48	–	49	6	51	–	52	6
10	...	50	–	51	8	53	4	55	–	56	8	58	4
11	...	55	–	56	10	58	8	60	6	62	4	64	2
12	...	60	–	62	–	64	–	66	–	68	–	70	–
13	...	65	–	67	2	69	4	71	6	73	8	75	10
14	...	70	–	72	4	74	8	77	–	79	4	81	8
15	...	75	–	77	6	80	–	82	6	85	–	87	6
Rates per Week.		30s.		31s.		32s.		33s.		34s.		35s.	
Rates per Day of 10 hrs.		5s.		5s. 2d.		5s. 4d.		5s. 6d.		5s. 8d.		5s. 10d.	

FROM 36s. TO 41s. PER WEEK.

Rates per Week.		36*s*.		37*s*.		38*s*.		39*s*.		40*s*.		41*s*.	
DAYS.	HRS.	*s*.	*d*.	*s*.	*d*.	*s*.	*d*.	*s*.	*d*.	*s*.	*d*.	*s*.	*d*.
...	½	–	3½	–	3½	–	3½	–	3¾	–	4	–	4
...	1	–	7¼	–	7¼	–	7½	–	7¾	–	8	–	8
...	1½	–	10¾	–	11	–	11¼	–	11½	1	–	1	–
...	2	1	2½	1	2¾	1	3¼	1	3½	1	4	1	4¼
¼	2½	1	6	1	6½	1	7	1	7½	1	8	1	8½
...	3	1	9½	1	10¼	1	10¾	1	11¼	2	–	2	–½
...	3½	2	1¼	2	1¾	2	2½	2	3¼	2	4	2	4½
...	4	2	4¾	2	5½	2	6½	2	7¼	2	8	2	8½
...	4½	2	8¼	2	9¼	2	10¼	2	11	3	–	3	–½
½	5	3	–	3	1	3	2	3	3	3	4	3	5
...	5½	3	3½	3	4½	3	5¾	3	6¾	3	8	3	9
...	6	3	7¼	3	8¼	3	9½	3	10¾	4	–	4	1
...	6½	3	10¾	4	–	4	1¼	4	2¾	4	4	4	5
...	7	4	2¼	4	3¾	4	5¼	4	6¾	4	8	4	9¼
¾	7½	4	6	4	7½	4	9	4	10½	5	–	5	1½
...	8	4	9½	4	11	5	1	5	2½	5	4	5	4½
...	8½	5	1¼	5	2¾	5	4½	5	6¼	5	8	5	9½
...	9	5	4¾	5	6½	5	8½	5	10¼	6	–	6	1½
...	9½	5	8¼	5	10¼	6	–	6	2	6	4	6	5½
1	...	6	–	6	2	6	4	6	6	6	8	6	10
2	...	12	–	12	4	12	8	13	–	13	4	13	8
3	...	18	–	18	6	19	–	19	6	20	–	20	6
4	...	24	–	24	8	25	4	26	–	26	8	27	4
5	...	30	–	30	10	31	8	32	6	33	4	34	2
6	...	36	–	37	–	38	–	39	–	40	–	41	–
7	...	42	–	43	2	44	4	45	6	46	8	47	10
8	...	48	–	49	4	50	8	52	–	53	4	54	8
9	...	54	–	55	6	57	–	58	6	60	–	61	6
10	...	60	–	61	8	63	4	65	–	66	8	68	4
11	...	66	–	67	10	69	8	71	6	73	4	75	2
12	...	72	–	74	–	76	–	78	–	80	–	82	–
13	...	78	–	80	2	82	4	84	6	86	8	88	10
14	...	84	–	86	4	88	8	91	–	93	4	95	8
15	...	90	–	92	6	95	–	97	6	100	–	102	6
Rates per Week.		36*s*.		37*s*.		38*s*.		39*s*.		40*s*.		41*s*.	
Rates per Day of 10 hrs.		6*s*.		6*s*. 2*d*.		6*s*. 4*d*.		6*s*. 6*d*.		6*s*. 8*d*.		6*s*. 10*d*.	

FROM 42s. TO 50s. PER WEEK.

Rates per Week.		42*s*.		43*s*.		44*s*.		45*s*.		47*s* 6*d*		50*s*.	
DAYS.	HRS.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
...	½	–	4	–	4	–	4½	–	4½	–	4¾	–	5
...	1	–	8¼	–	8½	–	9	–	9	–	9½	–	10
...	1½	1	–½	1	1	1	1	1	1½	1	2¼	1	3
...	2	1	4½	1	5	1	5½	1	6	1	7	1	8
¼	2½	1	9	1	9½	1	10	1	10½	1	11¾	2	1
...	3	2	1	2	2	2	2½	2	3	2	4½	2	6
...	3½	2	5	2	6	2	7	2	7½	2	9¼	2	11
...	4	2	9½	2	10½	2	11	3	–	3	2	3	4
...	4½	3	2	3	3	3	3½	3	4½	3	6¾	3	9
½	5	3	6	3	7	3	8	3	9	3	11½	4	2
...	5½	3	10	3	11½	4	–½	4	1½	4	4¼	4	7
...	6	4	2	4	3½	4	5	4	6	4	9	5	–
...	6½	4	6½	4	8	4	9	4	10½	5	1¾	5	5
...	7	4	11	5	–	5	1½	5	3	5	6½	5	10
¾	7½	5	3	5	4½	5	6	5	7½	5	11¼	6	3
...	8	5	7½	5	9	5	10½	6	–	6	4	6	8
...	8½	5	11½	6	1	6	3	6	4½	6	8¾	7	1
...	9	6	3½	6	5½	6	7	6	9	7	1½	7	6
...	9½	6	8	6	10	6	11½	7	1½	7	6¼	7	11
1	...	7	–	7	2	7	4	7	6	7	11	8	4
2	...	14	–	14	4	14	8	15	–	15	10	16	8
3	...	21	–	21	6	22	–	22	6	23	9	25	–
4	...	28	–	28	8	29	4	30	–	31	8	33	4
5	...	35	–	35	10	36	8	37	6	39	7	41	8
6	...	42	–	43	–	44	–	45	–	47	6	50	–
7	...	49	–	50	2	51	4	52	6	55	5	58	4
8	...	56	–	57	4	58	8	60	–	63	4	66	8
9	...	63	–	64	6	66	–	67	6	71	3	75	–
10	...	70	–	71	8	73	4	75	–	79	2	83	4
11	...	77	–	78	10	80	8	82	6	87	1	91	8
12	...	84	–	86	–	88	–	90	–	95	–	100	–
13	...	91	–	93	2	95	4	97	6	102	11	108	4
14	...	98	–	100	4	102	8	105	–	110	10	116	8
15	...	105	–	107	6	110	–	112	6	118	9	125	–
Rates per Week.		42*s*.		43*s*.		44*s*.		45*s*.		47*s* 6*d*		50*s*.	
Rates per Day of 10 hrs.		7*s*.		7*s*. 2*d*.		7*s*. 4*d*.		7*s*. 6*d*.		7*s*. 11*d*.		8*s*. 4*d*.	

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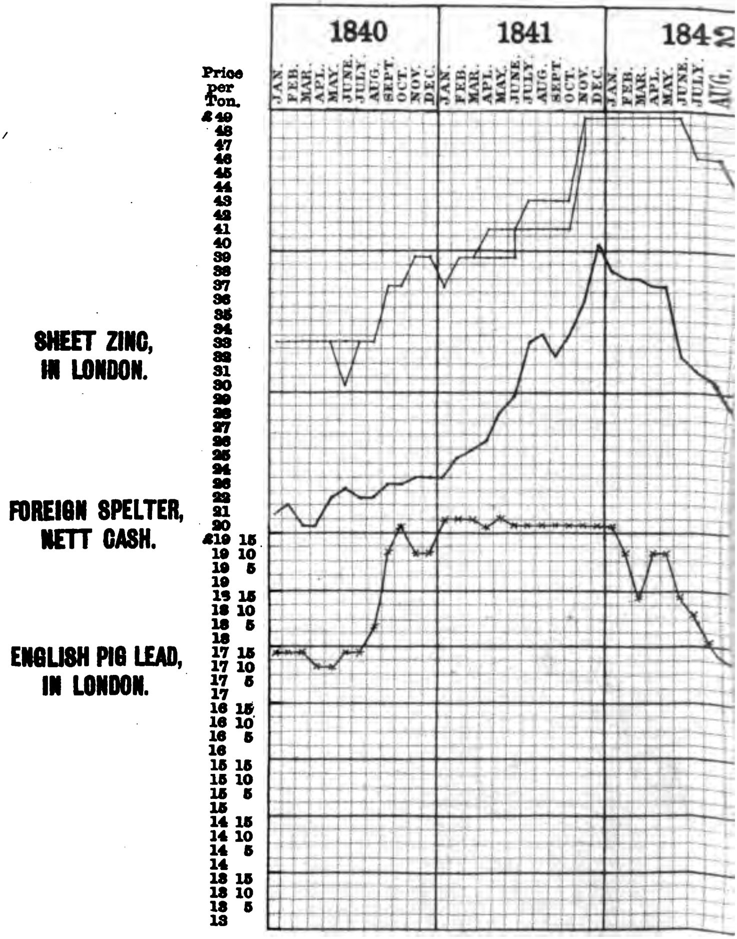
THREE DIAGRAMS,—after this Index,

Showing the Prices of the principal Metals on the First Saturday of each Month, from January, 1840, to December, 1855.

A. PICKARD, PRINTER, BRIGGATE, LEEDS.

DIAGRAMS



ENGRAVED FOR BEECROFT'S, COMPANION TO THE IRON TRADE, BY ALX. FALKNER GREEK-ST.

, Nos 1, 2, AND 3, SHOWIN

ON THE FIRST SATURDAY OF EA

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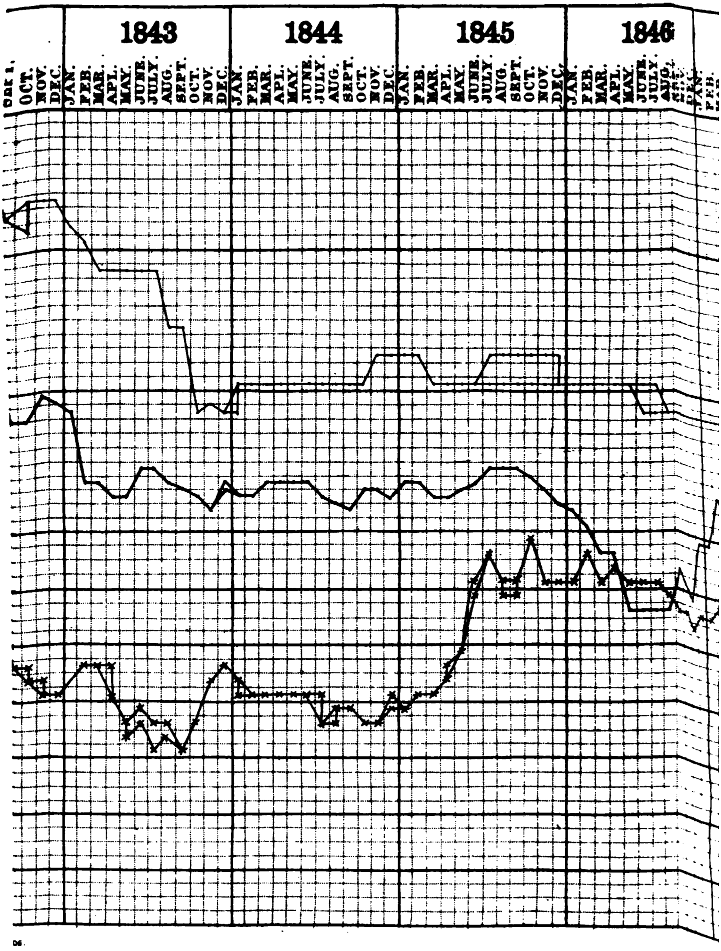

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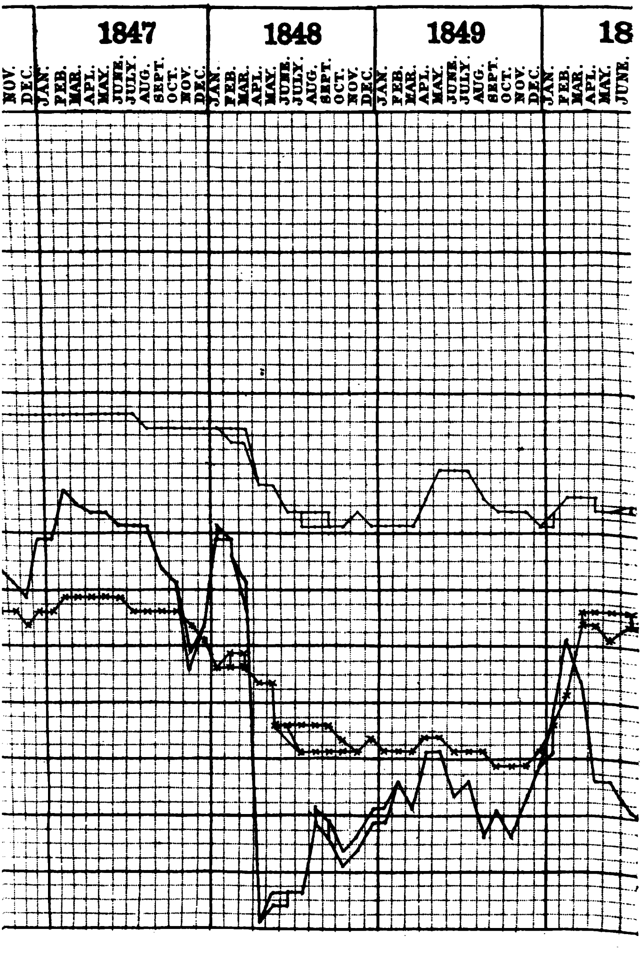

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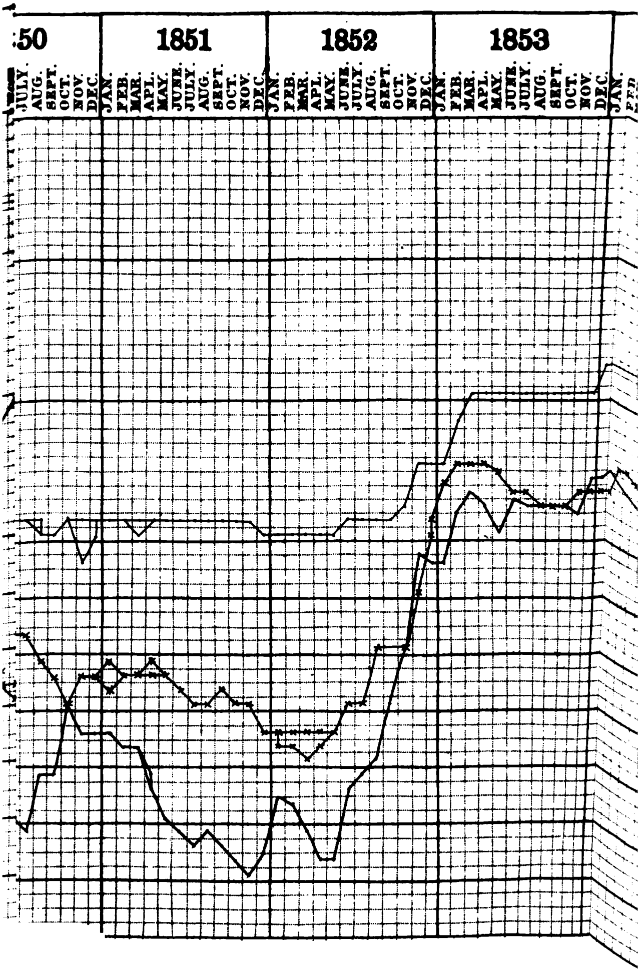
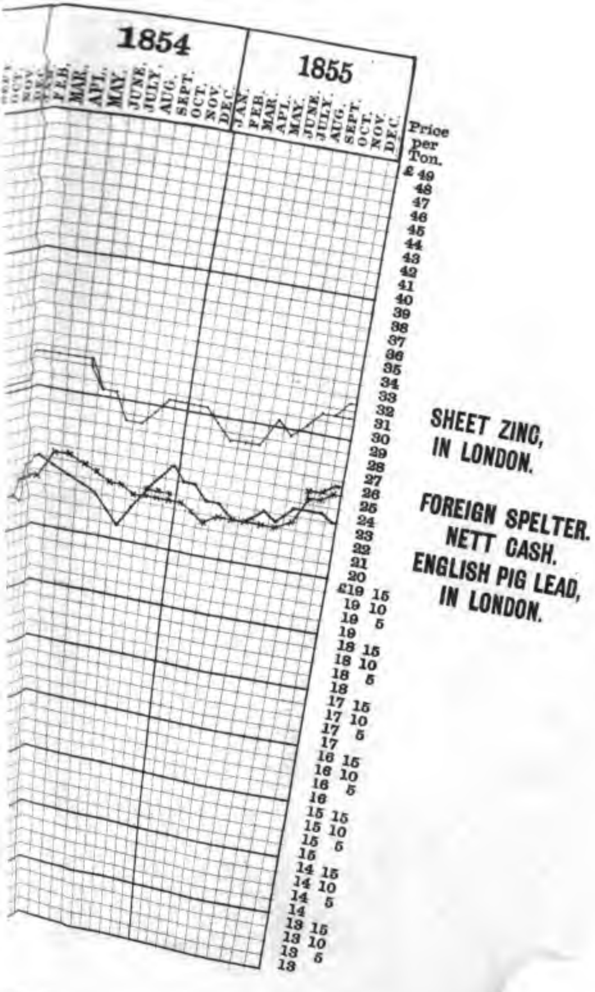


METALS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JUNE.
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Price per Ton.
£ 49
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SHEET ZINC, IN LONDON.
FOREIGN SPELTER. NETT CASH.
ENGLISH PIG LEAD, IN LONDON.